HYGEIA

A JOURNAL OF INDIVIDUAL AND COMMUNITY HEALTH

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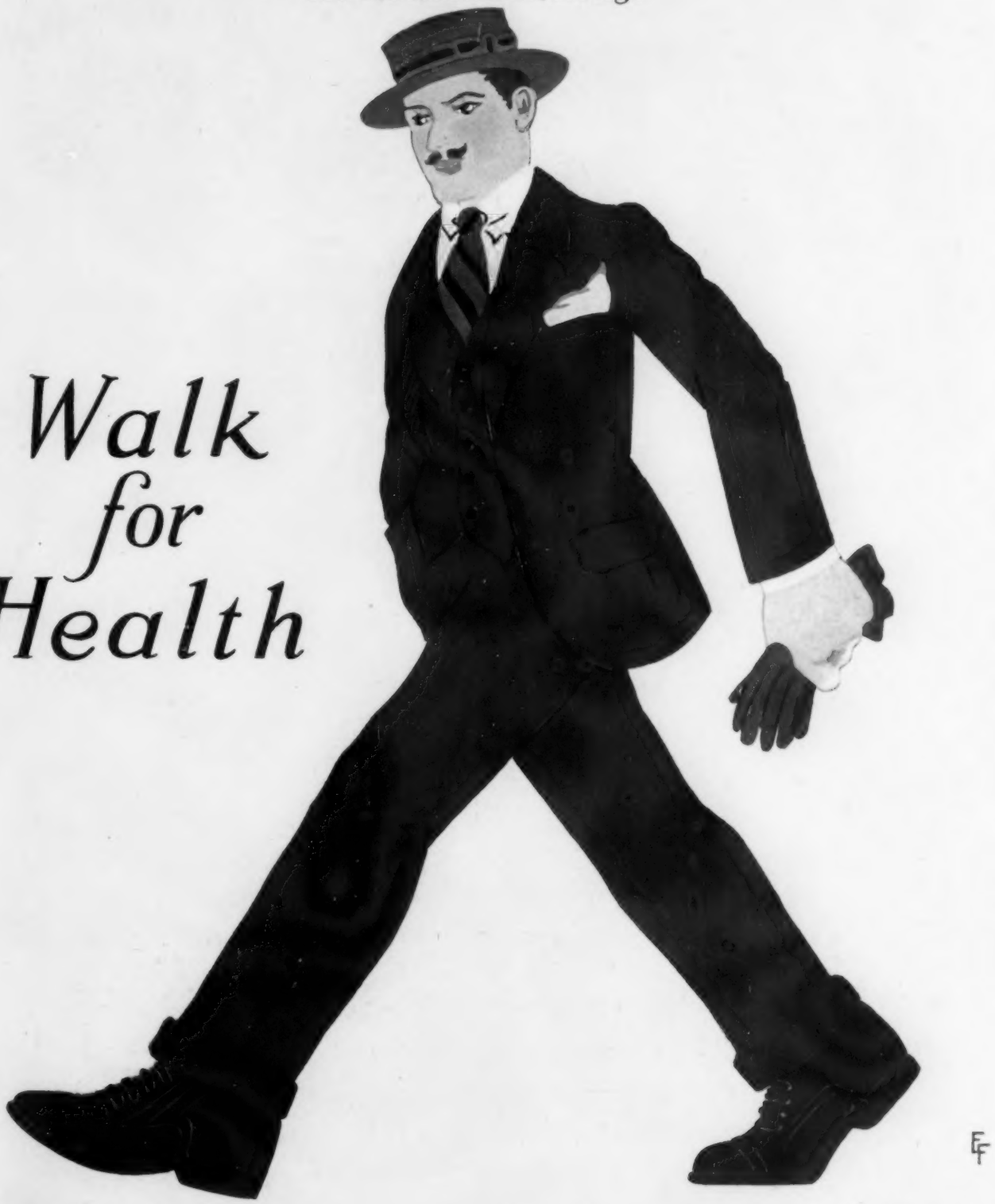

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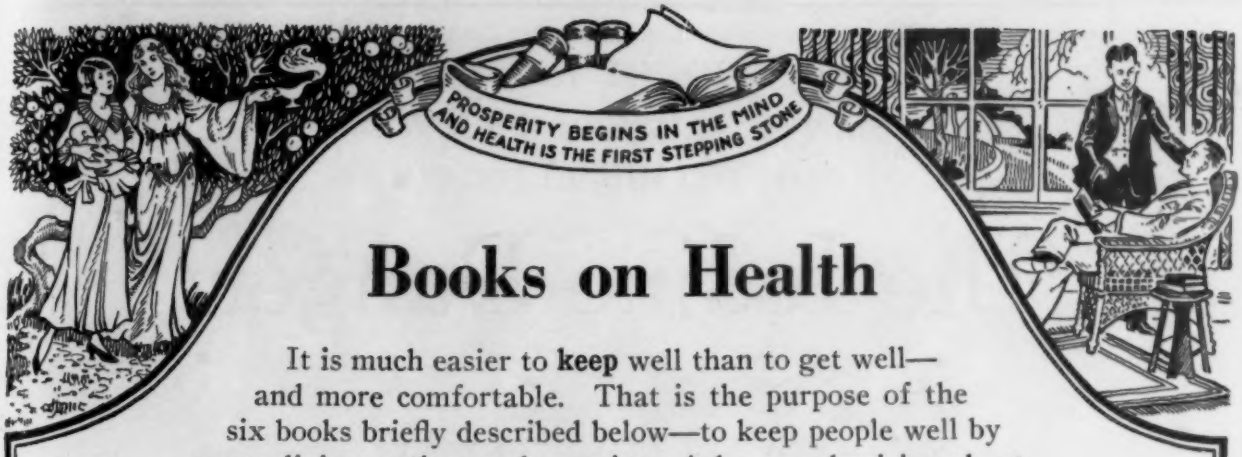

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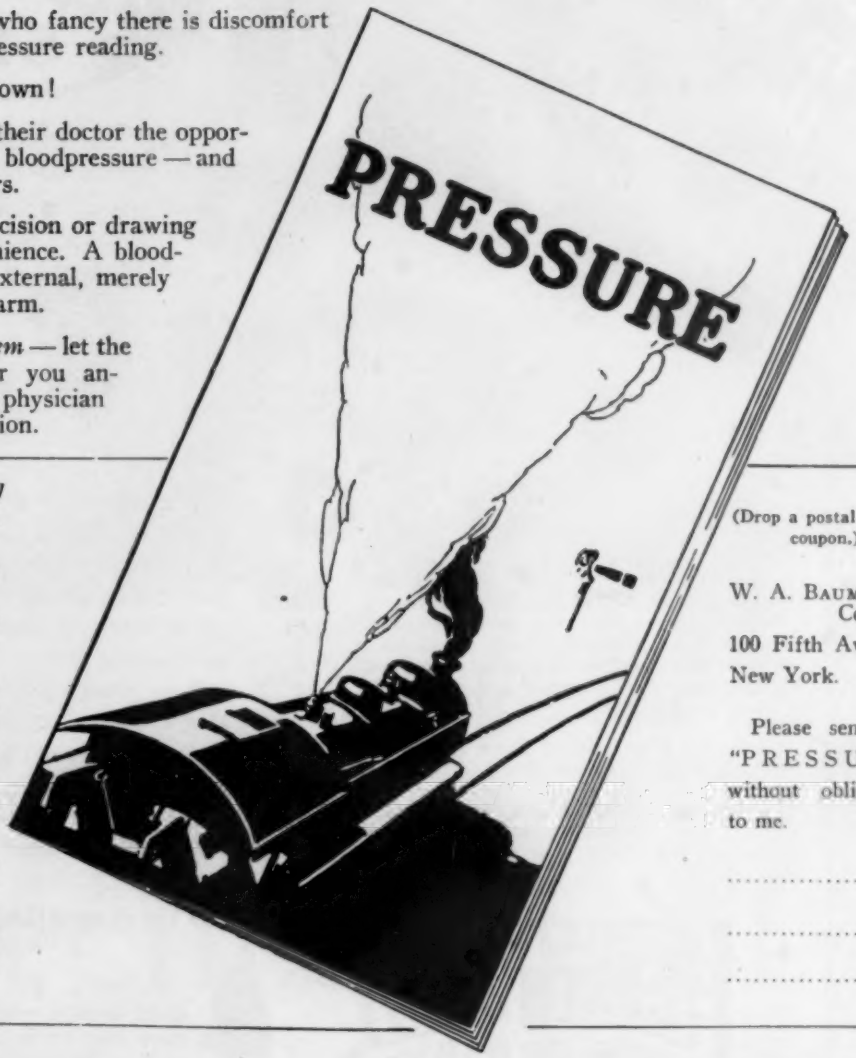

A Bloodpressure Reading

1. The doctor seats you comfortably in a chair.
2. You turn back the sleeve on your left arm.
3. The doctor wraps a soft cuff around your arm, above the elbow.
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Awarded Certificate of Merit by Illinois State Medical Association.

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HYGEIA

A JOURNAL OF INDIVIDUAL AND COMMUNITY HEALTH

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MARCH CONTRIBUTORS

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In the April Issue:

RUN AWAY AND PLAY

Are your children told to run away and play? Where do you expect them to run? With what do you expect them to play?

How the busy mother can keep her child occupied, and thus out of mischief, will be told by Anna Dee Weaver, a student of child care and management.

CORRECTING OUTSTANDING AND CAULIFLOWER EARS

The first of the timely and profitable series on Cosmetic Surgery, promised HYGEIA readers, has been prepared by Dr. Samuel Iglauer. No one who hopes to be well informed can afford to miss this series, which tells what modern surgery can and cannot do in the way of remedying facial defects.

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Poster by Ernestine Feinberg, awarded third prize in HYGEIA health poster contest.

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NOW in our histories we read
The carrot once was thought a weed;
The thrifty Dutch, who saw it grow,
Began to eat it long ago.
It made their children strong and tall
With rosy cheeks, nor is that all;
Soon other people liked the taste,
And planted carrots in great haste.
So now the whole world loves to eat
These tender carrots with their meat.

Suggestions for Coloring This Page with Crayon

Make the windmill green and the house red. Leave the mother's apron and the caps white. Color the mother's dress red and the little girl's dress blue. Make the shoes and basket yellow, and the carrots orange with green tops.

Duplicates of this poster mailed to any address, postpaid, at 40 cents a dozen. No orders for less than a dozen.

The Feeling of Inferiority

H. DOUGLAS SINGER

THE most important factor in happiness is mental health. Keeping well in body depends in the first place on a healthy mind. Even if we disregard the fact that every mental upset is accompanied by a disturbance in the functioning of the bodily organs, it is still impossible to follow the rules of hygiene without mental discipline.

A healthy body means something more than a body free from disease. It means a body whose organs are cooperating harmoniously and satisfactorily in meeting the conditions under which it lives. The force that directs and coordinates, that makes the separate organs into a whole man, is the mind.

A man with a diseased kidney or lung or with an inherited defect, such as absence of the organs of sight or hearing, may still have a healthy mind. That is to say, he may still employ such organs as he has to their best advantage and may achieve success, happiness for himself and usefulness to society, in spite of his handicap. Conversely, a man with an entirely healthy body may so misdirect its activities that his life is a failure and a source of suffering to himself and others.

What is here meant by mind is really how the man behaves. Our minds are revealed to others only through our words and deeds. Behavior is largely the outcome of the habits each person forms as he goes through life; our minds are largely the outcome of the training and experience we individually receive.

Genius Does Not Prevent Unhappiness

In this respect mind differs greatly from the organs of our bodies that we inherit from and owe to our ancestors. We can do little to change our organs, even though medicine and surgery can, in some conditions, accomplish results that seem little short of marvelous in remedying or compensating for existing disease or defect. We can, it is true, do much to avoid disease or compensate for defects by establishing proper habits of living; however, the formation of these habits is primarily mental.

The situation with regard to our minds is different; to a large extent the quality of the mind is determined after we are born. Persons differ in respect to the quality of the brain with which they are endowed at birth. The amount of knowledge we are capable of acquiring depends on the quality of the brain we inherit, and we are not all born equal in this respect. But in regard to the pursuit of happiness or health of mind, the use we make of our knowledge is of far greater moment than its extent. Even a feebleminded person can be happy and relatively efficient, while genius is no preventive of unhappiness.

Other inherited physical qualities have a big influence in determining the types of activity for which each of us is suited. To a large extent these qualities appear to depend on the vigor or energy of our actions and to be inherent in the structure of our bodies.

One man is vigorous, energetic and forceful, constantly on the move; another is more satisfied with quieter and less active pursuits. One man is born to lead; another is happier and more efficient when led. Some men are sensitive, imaginative, artistic; others are more phlegmatic and practical. No one of these different types is more normal than the others; there is room and work in the world for men of all these types, and all can be useful and happy if trained to suitable habits and activities.

Appetites Must Be Controlled

The purpose of all activity is the maintenance of life. Primitively, those activities that serve most directly for gaining this end, such as feeding, breathing and reproduction, are accompanied by strong feelings of pleasurable gratification. These feelings and their forerunners, the desires or appetites, are inherent in the performance of the functions with which they are connected and are entirely natural and proper; they cannot be escaped. Furthermore, failure to satisfy them is accompanied by feelings of unrest and worry, which may mount to fear and anxiety.

Man, however, no longer lives under primitive conditions; he has become a social animal and his individual desires must be controlled and regulated to accord with the welfare of the social group. This does not mean that they

must be abolished or suppressed, an effort that is not only impossible but also undesirable. It does mean that some way must be found for satisfying them that is socially permissible.

Often their original purpose must be transformed into some other shape. For example, the primitive appetites for hunting and fighting have been largely diverted into the channels of business and athletic competition.

We must recognize then that there are wide differences in the abilities and aptitudes of different persons; yet underlying all are the same primitive appetites and longings that must be brought under control. In some instances these appetites must be directed into new channels; in others they must merely be postponed until certain conditions have been fulfilled.

Redirecting Primitive Desires

The machinery for developing this control is provided in the mind. Through its memories of past successes and failures, with their accompanying pleasures and pains, and through its ability to look ahead and postpone action, habits of behavior can be established that will be more or less satisfactory according to their appropriateness.

The particular channels into which to direct the primitive desires can be chosen from a vast array of possible interests. The selection, to be successful, must take into consideration the capabilities and aptitudes of the person to be trained as well as the opportunities available. The range of interests is indicated by such fields as practical work and business of all kinds, sport, art, science, religion and philanthropy.

Unfortunately, all of us do not successfully discover the best substitutions to make. One of the most important factors in determining the degree of success is the training we receive in childhood, especially in the earliest years. Failure necessarily entails more or less unhappiness and unrest; indeed it seems permissible to state that by far the greatest amount of suffering, inefficiency and even illness in the world arises on this basis.

Among the frequent consequences of such failures is the state of mind commonly alluded to as a "feeling of inferiority" or the possession of an "inferiority complex." To a brief consideration of this habit of mind, the remainder of this article will be devoted.

Most of us have this feeling at certain times in our lives; when, for example, we are called on to face some unusual situation, to make a speech, fill a new job, or take a prominent part in some social function. There is no need to describe in detail the palpitation and trembling, the stammering and vacuity of thought that come over us.

If we have established habits of courage and self-reliance, and if we have learned to attend to the matter in hand rather than to our own feelings, these difficulties soon pass off. Failure to meet the circumstances satisfactorily tends to enhance the difficulties of similar situations in the future; familiarity with and successful overcoming of them results in their diminution.

The almost universal experience of such feelings demonstrates that they are not abnormal and are not evidence of disease. The fact that they disappear with successful accomplishment and familiarity proves that they are capable of remedy. In this latter respect, however, it is important to remember that the more habitually we have sidestepped and failed to deal with them successfully, the more difficult will it be to break the habit.

Feelings of inferiority, instead of being temporary and arising only in connection with markedly unusual situations, may come to dominate the whole relation of a man to his surroundings. He has not learned to face situations frankly, but has instead established a habit of fear. With this feeling go the uncomfortable sensations already indicated, and the lot of such a man is indeed unhappy.

Causes of Inferiority Complex

The causes are many and various, usually multiple. In dealing with a particular person suffering from such a state of mind, the particular causes can be determined only by a detailed study of his life. There is nothing in the symptoms of which he complains that will enable one to deduce precisely the underlying causes in his case. Each case is individual and particular, and it is impossible to do more here than to outline some of the factors that are commonly found. A knowledge of these, however, may enable parents to avoid some of the most obvious of them in the training of their own children.

The essence of the difficulty is the feeling of being different from others and of being incapable of doing things as others do them. It is only logical, therefore, to seek for causes that have in some way taught the person to believe himself different. It may be that there are actual and irremediable handicaps that have not been detected or properly interpreted. But it is also possible that the feeling of handicap is based purely on imagination or is such that it can be corrected. For this reason it is important that no one should undertake the study and treatment of such cases who is not a physician.

Our childhood experience in connection with the attitude of parents and others toward our successes, failures, aptitudes and abilities is highly important in the training of our attitude toward ourselves.

Ridicule, continual fault-finding, uncomplimentary comparisons with other children, baleful prognostications for our future, refusal of

permission to do things for fear of spoiling something or because of alleged clumsiness are such obvious causes for self-depreciation that they need no discussion. On the other hand, it is not quite so obvious that overpraise, commendation and the blind ignoring of faults in accomplishment may lead to the same result when the idolized child eventually comes to face a less sympathetic and indulgent critic.

Not uncommonly, the feeling of inferiority is founded on some actual personal difference between the child and the generally accepted standards of his surroundings. This may arise even when the difference, perhaps in other circumstances, is fully as desirable a quality as that of the general standard.

Thus, the boy of sensitive nature who experiences a deep appeal in the more intellectual refinements of art and music will find himself isolated and relatively unsuited to his surroundings if he happens to have been born amid the rougher and more practical conditions of a cattle ranch. The ranch ideal is the man with love for and dexterity in muscular pursuits.

Even though the boy is not a weakling, and is able to ride and do the work of the ranch, he fails to find full satisfaction in it. His artistic longings are misunderstood and may be ridiculed by his fellows, and he may come to neglect his work because he gets absorbed in reading or reverie. He may easily learn to regard himself as soft, effeminate and inferior. On the other hand, such a situation may be purely artificial and result from acquired habits.

Superior Child Often Victim

The boy who is too closely guarded and coddled and who is taught to consider a prudish gentility and breeding as the highest of ideals is very liable to be inferior in physique when compared with other boys of his age. His acquired ideals may lead to ridicule or neglect at school; being weak muscularly, he finds himself unable to compete on even terms in the games and sports or to resent the unfriendly attitude of his associates, and he may easily come to regard himself as inferior. If he was trained intensively in physical culture, he could, if fundamentally healthy, overcome this situation.

The child of superior intelligence is peculiarly liable to such occasion. His learning ability is often a matter of pride and display on the part of his parents; his rapid progress at school carries him ahead of boys of his own age and physical development, and his physical training is very liable to be neglected in favor of mental training. Under these handicaps, it is not extraordinary that he may develop into an intellectual prig or succumb to feelings of inferiority.

Parents often disregard the feelings of a child to satisfy some craving of their own. Even such

The boy of sensitive nature who experiences a deep appeal in the mere intellectual refinements of art and music will find himself isolated and relatively unsuited to his surroundings if he happens to have been born on a cattle ranch.

apparently trivial matters as dressing and doing the hair differently from the fashion prevailing among other children may be potent cause for trouble. Anything that sets a child apart from his fellows is a handicap that must be faced; it should be avoided unless there are good reasons.

Sometimes the interference by parents is not trivial, yet it may be entirely unintentional. It is common to find a devoted father who hopes to gratify his own unsatisfied ambitions in the person of his son. Many a lad has been pushed into high school or college for this reason, when he is not intellectually or temperamentally fitted for it.

Similarly, this may take place with regard to the selection of a career. Often such ambitions on the part of parents have been present since the birth of the child and have been talked over so much that they have come to be regarded as inevitable and possibly even as the choice of the child himself.

Frankness on Sex Matters

Finally, mention must be made of the important question of sex instruction. As the result of parental prudery or reticence, a child may be led tacitly to believe that the feelings and activities connected with sex are wicked and unspeakable. Thoughts on such matters are therefore equally taboo. When the inevitable awakening of such feelings and such curiosity comes, it is easy to understand the terrible internal conflict that will arise.

It is surely better to deal with this subject frankly and truthfully than to leave the discoveries and ways of meeting them to chance. Rarely does one study a case of marked feeling of inferiority in which this question is not at least a subsidiary factor.

Fathers and mothers find it difficult to give up their babies. They put off the realization that their children are persons who must be trained to accept responsibilities and to face difficulties for themselves. Protection from temptation and from difficulty is poor preparation for life. Appetites are present in everybody, and the most important lesson is that of their control. To accomplish this, discipline is essential, but it must be a discipline that is objective and impersonal.

To allow a child to do as he pleases, even in the apparently trivial matters of hours and kind of food, regular habits of sleep and personal cleanliness, is to lay a foundation for mental habits that may so develop as to ruin the whole life.

It should be remembered that children learn little by precept; they are able mimics, even in matters they do not understand, and it is difficult to establish habits of self-discipline in an atmosphere of self-indulgence and irregularity.

Traveling with the Baby

JULIUS H. HESS AND I. McKY CHAMBERLAIN

THE only place to care for an infant properly is at home. Traveling affords no pleasure to the infant and often less to the mother. Indeed, traveling may be a real hazard for the infant unless careful arrangements have been made.

This is more true of the young infant, especially if he is artificially fed. Travel is a serious undertaking and should not be considered except with a normal, healthy baby. The usual vacation trip is not suitable if there is an infant, the danger to the child being too great and the work of the mother being so increased that the journey loses its value for her.

At times it may be necessary to travel with the baby. A definite plan must be made for food, clothing and care, if the trip is to be made with safety and convenience.

Breast-Fed Baby Fares Better

The breast-fed infant is more fortunate than the bottle-fed, as his supply of food is less likely to be affected. There is no worry about unfit or sour milk, and at such a time the mother appreciates the convenience of breast feeding. Her supply may become short if she does not follow her usual routine as closely as possible. Meals should be regular and consist of food to which she is accustomed. The usual amount of fluids should be taken. Bottled distilled water will be found convenient, especially on motor trips, and can be obtained at most drug stores along the way.

Needless to say, regularity in nursing is as important as when at home. Water for the baby should be boiled; a supply for the short trip may be

The dining car steward is pointing out to the baby's mother the certified milk label on the bottle.

Photos Courtesy Northern Pacific Railway

prepared before starting. On longer trips, bottled distilled water may be used. Cod liver oil, if given, may be omitted while traveling with no ill effect to the infant.

Preparing Bottles

The artificially fed infant is a greater problem. For other than short trips the physician in charge should be consulted, so that he may prescribe the feedings and give such directions as are necessary. For the short trip of twenty-four hours or less, the feedings may be prepared at home. A quart thermos bottle is sufficient for the usual demand. It should be carefully cleansed before using. The milk mixture should be prepared as usual by boiling or heating in a double boiler, then thoroughly chilled on ice before being placed in the thermos bottle. Warm milk should never be carried in these containers, as every opportunity is thus offered the few bacteria present to multiply rapidly. The feedings may be packed in ice, or a portable ice chest may be used on motor trips. These require frequent attention and are cumbersome methods. It is usually possible when traveling by train to have the feedings kept in the dining car ice box.

Feeding bottles may be sterilized, allowed to dry and then stoppered with sterile cotton. Nipples may be boiled and carried in a sterilized jar, such as a small mason or mayonnaise jar. These articles had best be packed in a covered box or pail.

To warm the bottles at feeding time, a second thermos filled with hot water will be convenient. On the train hot water may be obtained from the diner and, when motoring, from the radiator of the car. Sterno bottle warmers may be obtained for $2 and are compact as well as efficient. On long trips such an outfit is most convenient, as a pint of water or milk mixture can quickly be brought to the boiling point. Thus additional supplies may be prepared. It is advisable to become accustomed to using these stoves and a feeding or two should be prepared on them at home before starting.

Dried Milk Better for Long Trip

Trips of more than twenty-four hours necessitate a fresh supply of feedings. This means a change in milk supply; care should be used that only fresh, clean milk is obtained. Even the best milk that can be secured while traveling should be boiled before it is given to the infant. Because of the possible higher fat content, it is usually advisable to remove a part of the cream before making up the feedings.

Dried milk is to be preferred for both safety and convenience on a long trip. A supply for several days may easily be carried. To prepare the feeding, boiled or distilled water and usually some form of sugar are needed. No additional boiling is necessary. A physician should be consulted, and he will advise the strength of the feedings and the kind and amount of sugar.

The chef will warm the baby's bottle to the required temperature or will even prepare it according to the mother's directions.

Baby May Be Carried in Basket

A basket for carrying the infant of six months or under affords a safe and comfortable place for the infant and allows the mother or nurse added freedom. These may be obtained already padded and lined in any nursery department. A market basket or ordinary small laundry basket may be used.

Clothing sufficient to keep the baby warm is essential, and the supply should be ample for unexpected changes that may become necessary. A piece of mosquito netting will protect the infant from flies and other insects. Extra covering for the night should be provided.

Diapers for the trip are a problem. The use of paper liners, which are on the market, is an aid. Rubber pants, with infrequent changing, are not to be recommended even while traveling. Wet diapers may be kept in a roll of rubber sheeting or in a bag of this material.

The infant's life should be disturbed as little as possible, and the usual routine followed closely, both in feeding times and in sleeping hours. Even with the precautionary measures mentioned, traveling is a hardship for the young infant.

A Change of Climate

GUY HINSDALE

CLIMATE sometimes cures or relieves the sick; in other cases it aggravates their affections. The migration of invalids in search of a better climate furnishes a pathetic picture, but often the journey is rewarded with health.

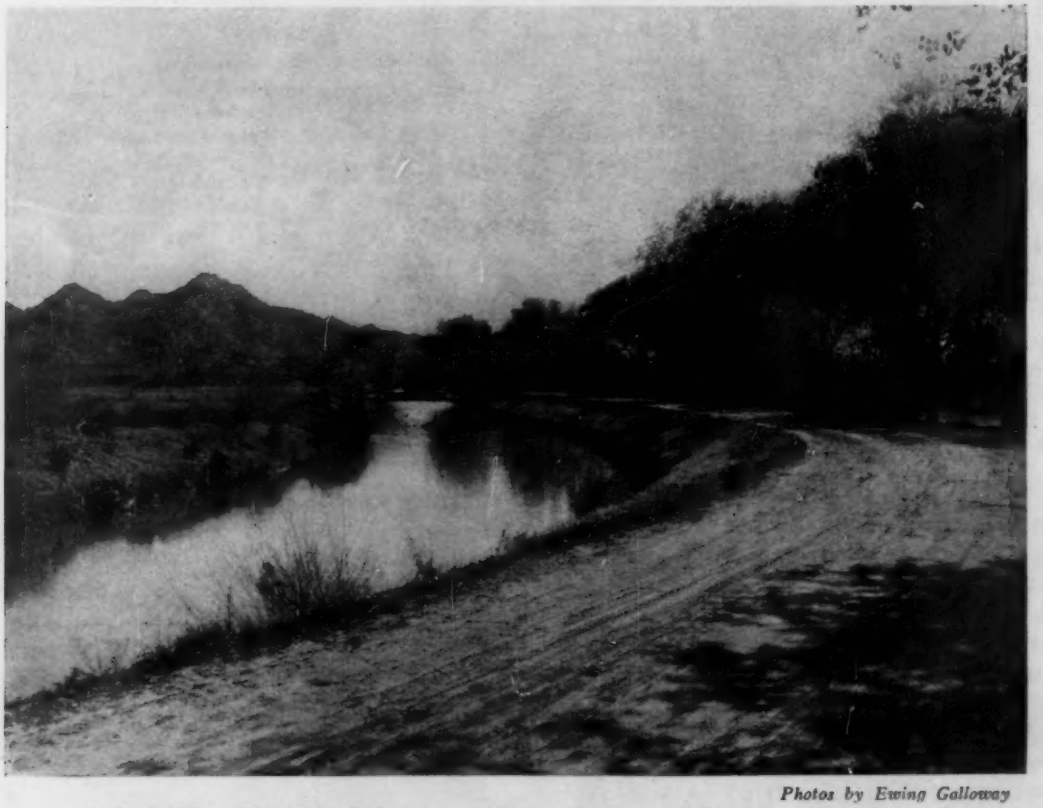
In the old days when invalids with affections of the lungs or throat started west, taking six or eight weeks to reach their destination, they were gradually acclimated to increasing altitude, to more constant sunshine and to exposure to the air. They gained muscular development and a healthy skin.

Persons going to an elevation for the relief of lung trouble, especially to the higher stations in Colorado, New Mexico and Arizona, are not nowadays subjected to the intermediate altitudes and are not acclimated en route. Therefore, there is more danger from thoughtless exertion and from other follies than in the days of the stage coach.

There is no foolproof climate, but there are places where one can learn the rules of the game before going to distant health resorts, and in such instances sanatorium training is useful. Sanatorium training teaches the patient how to live and adjust his conduct with reference to himself and others, so that he may make the most of the climate that he sets out to find.

A desirable climate includes, obviously, pure air, maximum sunshine, equable temperature—not uniform throughout the day and night but free from sudden changes and what we call extreme weather—and, with these, the creature comforts of good accommodation and necessary food.

It was formerly believed that the soft air and unchanging temperature of the island of Madeira was beneficial to consumptives; now it is known that cold is not harmful but in fact it is stimulating to the appetite and to all the vital processes.



Photos by Ewing Galloway

A desirable climate includes pure air, maximum sunshine, equable temperature and the creature comforts of good accommodation and food. These features are provided near this spot at Phoenix, Ariz. In the photo are seen the Arizona Canal and the Camelback Mountains.

Dr. Trudeau said that his patients at Saranac Lake in the Adirondack Mountains always gained more in winter than in summer. In matters of climate, as in many other fields, it is the man behind the climate who will help the patient, save him from errors and indiscretions, advise and direct him as to local surroundings and enable him so to live that his disease can be arrested.

For the Tuberculous

Localities favorable for tuberculous patients comprise the elevated, sparsely settled regions of Colorado, New Mexico, Wyoming, Montana, Nevada, Utah, Arizona and California. The slopes of the Rocky Mountains and the Great Basin are justly entitled to the first choice, provided always that safeguards other than climate are to be had for the protection, comfort and nutriment of the patient. Texas, especially the central and higher western portion, must be included in this great area. Life in Texas was formerly too rough and food and accommodations too primitive for fastidious people, but now at places like San Antonio and El Paso these defects have been remedied. The winter climate of Texas is very agreeable, except when the Texas norther descends and holds everything in any icy clasp. However, this is not altogether a disadvantage, if the cold is not too severe.

A brilliant example of climatic cure is in the practice of heliotherapy, or sun treatment. This has recently been described in HYGEIA and can be seen in practical operation in various sanatoriums in the United States and Canada, as well as in Switzerland, France, Italy and England.

Altitude is not essential, but it is necessary at lower stations to use ultraviolet light from special lamps to supplement the sunshine when it fails. Obviously the air of cities, charged with smoke, dust and other foreign substances and with water vapor pertaining to the lower strata of the atmosphere, interferes greatly with the full reception of sunlight on the earth's surface. The ultraviolet rays from the sun are partly absorbed by the lower and denser layers of the earth's atmosphere, which carry water vapor, smoke, dust particles, gases and other impurities that greatly interfere with full sunlight in the cities. But at higher altitudes the thinner and purer air is much more pervious to these rays on which dependence is placed for the cure not only of tuberculosis but of many other chronic affections.

For Chronic Kidney Disease

Another disease amenable to climatic treatment is nephritis, or chronic Bright's disease. The acute form, as a rule, should be treated at home. The climatic elements to be considered in the treatment of the chronic form are

The elevated, sparsely settled regions of Colorado, New Mexico and California are often recommended for tuberculosis patients. This California scene is among the giant trees of the Yosemite Valley.

temperature changes, atmospheric humidity, wind, soil and altitude.

A fall of temperature makes the peripheral blood vessels contract, with a corresponding dilatation of the deeper vessels. Relaxation of the superficial vessels is by no means as prompt as their contraction, and in cold weather active measures, such as friction and massage, may be required to overcome the stoppage of the blood and lymph. Thus the effect on the kidneys of a fall in temperature is to increase the volume of the blood in the kidneys and to promote a rise of arterial tension, or blood pressure, by increasing the velocity of the blood flowing through them, and in all the deeper organs and viscera, so as to increase their excreting activity and output.

As cold weather cools the skin there is a decrease of sweat and, as a consequence, the watery excretion of the skin devolves, for the time being, on the kidneys, lungs and intestines; chiefly, as far as the evidence goes, on the kidneys.

Cold lowers the oxidizing capacity in the tissues. When the extensive skin envelop is deprived to some extent of its oxidizing capacity by cold, the body falls back on its heat-regulating apparatus to maintain its proper tissue change and a constant normal temperature of the blood.

Most cases of poisoning due to deficiency of action of the kidneys occur in cold weather; this would bear out the conclusion that faulty oxidation, which is primarily lowered by cold, is an important agent in causing uremia, the kidneys in that case, as well as the heat regulating apparatus, not being in a normal state of efficiency.

The influence of atmospheric humidity on the functions of the kidney is through its effect in promoting or retarding cutaneous and respiratory evaporation. With respect to the skin, evaporation from a moist surface depends in a quiescent air on the relative humidity. The nearer the point of saturation, the slower is the rate of evaporation; and the greater the deficit of saturation (low humidity), the more rapid the rate. It all depends on the temperature and the wind movement. The locality chosen should be conducive to an outdoor life the year round. This is the well known advantage of the climate of California, where the little rain that falls never does any harm.

Nervous patients as a whole do better at or near sea level and not too far from civilization. Florida may attract these, as well as persons with bronchitis and catarrh.

Chronic kidney disease is not influenced unfavorably by altitude; many persons with the disease do remarkably well in western Texas, in New Mexico and along the slope of the Rocky Mountains at five or six thousand feet elevation.

Undoubtedly the character of the soil has much to do with the prevalence of nephritis. A cold, damp clay soil, with sudden variations of temperature, is likely to chill the feet; this cooperates with other well known causes of kidney disease.

The softer air of Florida and southern California has worked wonders in many cases. Coronado, San Diego and stations up the coast as far as Santa Barbara; and inland stations, such as Riverside, Redlands and Pasadena, are to be chosen. Florida offers many good stations, especially in the interior.

A sandy soil, absence of cold winds, abundant sunshine, and life at a comfortable temperature indoors and out, make the best climate for the patient.

For Heart Disease

Probably the hardest question to decide is what to advise in cases of heart disease. Can the patient safely go to altitudes of 3,000, 5,000 or 10,000 feet?

If high altitudes are involved, such travel may be risky. Advice must depend a good deal on how the heart is affected. A person with an old valvular deficiency, well adjusted by a natural compensation in the muscle of the heart, may stand altitudes very well. On the other hand, those with muscular weakness, or myocarditis, usually suffer if transported too quickly to higher altitudes of even moderate degree. Sometimes they can go by slow stages; more often not at all. Difficult or labored breathing from heart disease, occurring at an elevation, may be relieved by going to sea level.

For Neurasthenics

Nervous diseases, especially neurasthenia, respond to climatic treatment. There is no special climate for this class of patients as a whole, but one must consider individual needs; men may thrive where women and young people would die of ennui. Camp life in summer and sea voyages along the coast may suit some. Probably neurasthenics, as a whole, do better at or near sea level and not too far from what we are pleased to call civilization.

Persons with bronchitis and catarrhs and convalescents from influenza, especially those living near the Great Lakes and in New England, often respond quickly to a change to the seashore; it may be Atlantic City or Florida.

The climate of a place varies somewhat with the weather. Frost has killed orange trees in Florida and southern California, and floods have inundated Phoenix, Ariz. Strange things happen; years are not always alike; climatic treatment, like medicinal or surgical treatment, is not always successful.

But climatic treatment has one great advantage: It operates with every breath we draw. The great natural forces of air and sunshine, the woods, the plains and the sea are elemental forces working on body, mind and spirit with great success in many cases.

Duping the Diabetic

ARTHUR J. CRAMP

DIABETES is popularly misconceived to be a disease of the kidney. It is not. It is a failure on the part of the body to burn up glucose, the simple sugar into which the body transforms the more complex sugars (such as cane sugar and honey) and starches (such as flour and potatoes) in order to produce muscular energy.

A well person can utilize or burn a large amount of glucose. A person with diabetes can burn either only a small quantity, or, in severe cases, practically none. As a result, this glucose accumulates in the blood stream and acts as a foreign substance, and those wonderful filters—the kidneys—do their best to remove it. Then it is that sugar appears in the urine.

Naturally, sugar in the urine is only a symptom and is not in itself a disease, but, when considered in connection with the total amount of urine passed, the amount of sugar excreted is a valuable index to the success of the treatment.

It is not uncommon for persons with diabetes to attempt to estimate roughly the amount of sugar they are excreting by testing the specific gravity of the urine. This is done in much the same way that one tests the storage battery of his automobile or radio. Unless such tests are made on the total amount of urine passed in twenty-four hours, the figures obtained can easily mislead. In other words, if, because of something the diabetic does, he passes twice the amount of urine in twenty-four hours that he usually excretes, then any individual specimen, when tested with the urinometer, will show an apparent decrease in the amount of sugar, because obviously any given specimen will have less sugar in it.

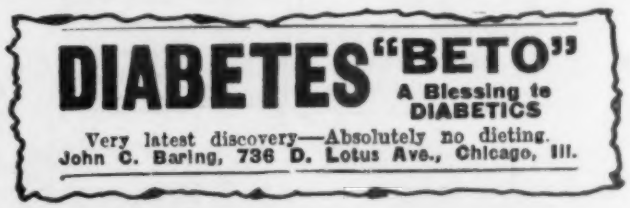
This fact is taken advantage of by quacks and venders of "patent medicines" for diabetes. They put drugs in the nostrums (diuretics) that have the effect of causing an increased excretion of urine. This is a particularly vicious treatment because it not only has absolutely no curative effect, but it also irritates kidneys that are already overtaxed by excreting sugar.

No drug or combination of drugs known at present will cure diabetes. Even the substance insulin, which was discovered after years of careful scientific research, does not cure the disease. All that insulin does is to restore to the diabetic the power of burning glucose. A given amount of insulin enables the body to burn a definite amount of glucose. Insulin, in fact, is the substance that is produced in the normal human body in the pancreas, and it is that which enables a healthy person to burn up the amount of sweets and starches that he gets in his diet.

The irritating quality of nostrums sold for diabetes is not the only dangerous element. Equally to be feared is the belief engendered by the quacks that the drug is the important element in the treatment. Hygienic and dietetic measures form the essential treatment in diabetes. For this reason there is no moral excuse for the sale of remedies for the self-treatment of so serious a condition as diabetes, and every "patent medicine" sold for the cure of this disease is inherently vicious and dangerous.

This article will deal with a few of the nostrums sold as remedies for diabetes. Not one of them has ever cured a case of diabetes, and some of them, probably all of them, have certainly been responsible for the death of some of those suffering from this disease.

Beto.—If the federal Food and Drugs Act were slightly amended so as to require the name and quantity of every drug in a "patent medicine" to be declared on the label, the vast majority of "patent medicines" would be laughed at by the public instead of being purchased. Beto has long been advertised as a "blessing to diabetics," as "the very latest discovery" and as a remedy the use of which makes it unnecessary for the diabetic to diet.


DIABETES "BETO"
A Blessing to DIABETICS
Very latest discovery—Absolutely no dieting.
John C. Baring, 736 D. Lotus Ave., Chicago, Ill.

The prospective victim is told that if he takes Beto he can eat just as he has been accustomed to. Beto sells for $5 a package. It comes in the form of 100 large, white, cinnamon scented tablets, each weighing about one-fourth ounce. When analyzed in the chemical laboratory of the American Medical Association, Beto was found to have the following composition:

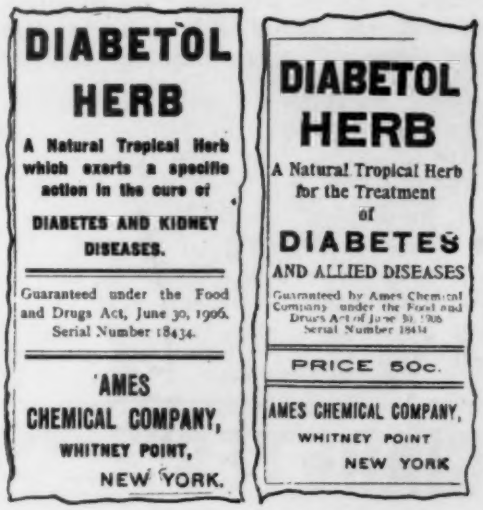
Epsom salt	97 per cent
Talc	3 per cent

In other words, the person that buys Beto simply gets 25 cents worth of epsom salt for his $5. If the law abolished secrecy of composi-

tion in the sale of home remedies, how many persons could be persuaded to pay $5 for a pound and a half of epsom salt? More important still, if the public had any means of knowing that Beto is nothing more mysterious than epsom salt, how many diabetics would ever purchase the stuff in the belief that they were going to be cured by this preposterous piece of quackery?

Diabetol.—This product, put on the market by the Ames Chemical Company of Whitney Point, N. Y., is said to be the discovery of one Frank M. Ames, a civil engineer. Ames is declared to have spent more than twenty years in "tropical jungles" and while there to have learned from an "absolutely reliable" native of the existence of an "herb that would cure diabetes."

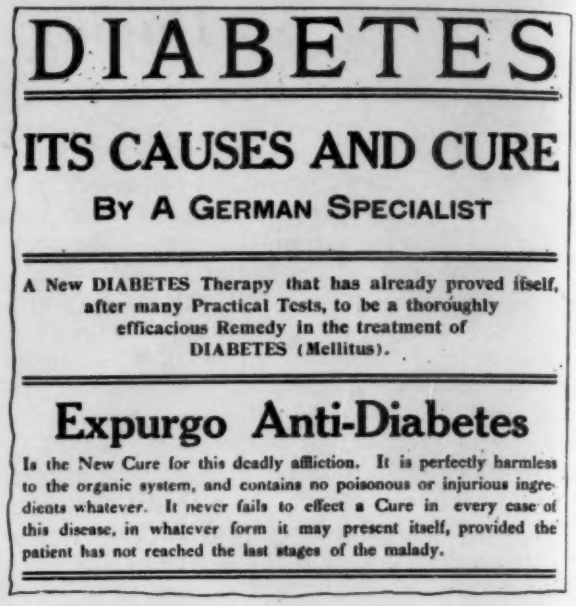
Diabetol was investigated a few years ago by the bureau of investigation of the American Medical Association. A number of the testimonials were traced, and it was found that several of the testimonial givers, who claimed to have obtained good results from the use of Diabetol, had actually died of diabetes. Others were found still to be suffering from the disease, while still others, it was shown, never had the disease.


DIABETOL
HERB
A Natural Tropical Herb which exerts a specific action in the cure of
DIABETES AND KIDNEY DISEASES.
Guaranteed under the Food and Drugs Act, June 30, 1906. Serial Number 18434.
AMES CHEMICAL COMPANY,
WHITNEY POINT,
NEW YORK.
DIABETOL
HERB
A Natural Tropical Herb for the Treatment of
DIABETES
AND ALLIED DISEASES
Guaranteed by Ames Chemical Company under the Food and Drugs Act of June 30, 1906 Serial Number 18434
PRICE 50c.
AMES CHEMICAL COMPANY,
WHITNEY POINT
NEW YORK

This product comes in the form of chopped herbs. The late Professor C. F. Millspaugh, who at the time was curator of the department of botany of the Field Museum, Chicago, identified the material as coming from a shrub belonging to the Bignonia family, which is found in Arizona southward through Mexico and Central America and the northern part of South America. This shrub has some local reputation as a diuretic; that is, a substance that will stimulate the kidneys and produce a larger flow of urine.

Diabetol is utterly without value in the treatment of diabetes.

Expurgo (Sanol) Anti-Diabetes.—This, like several other nostrums of the same type, is said by its manufacturers to be "the only positive cure for diabetes." The exploiters have never disclosed the composition of the preparation,


DIABETES
ITS CAUSES AND CURE
BY A GERMAN SPECIALIST
A New DIABETES Therapy that has already proved itself, after many Practical Tests, to be a thoroughly efficacious Remedy in the treatment of DIABETES (Mellitus).
Expurgo Anti-Diabetes
Is the New Cure for this deadly affliction. It is perfectly harmless to the organic system, and contains no poisonous or injurious ingredients whatever. It never fails to effect a Cure in every case of this disease, in whatever form it may present itself, provided the patient has not reached the last stages of the malady.

but have claimed that it was "exclusively derived from the vegetable kingdom."

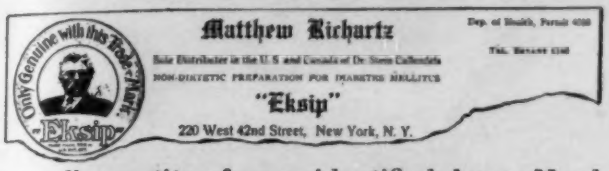
When it was analyzed in the laboratory of the American Medical Association, it was found to be essentially a watery solution of plant extractives with sodium salicylate and salt. The manufacturers have vaguely claimed that their stuff contained the fruit and bark of jambul as well as of certain other herbs. Jambul was tried as a remedy for diabetes about thirty years ago. It was found to be worthless and relegated to the therapeutic scrap heap.

Eksip.—This is a mail-order "cure" for diabetes marketed by Matthew Richartz. The advertising slogan of Richartz is: "No More Dieting! No More Starving! 'Eat and Get Well.'"

According to the advertising patter, Eksip is the discovery of "the famous Dr. Stein-Callenfels." This famous person, we are told, had wonderful success in treating diabetes with his discovery "Eksip." Unfortunately, "just as his fame was being spread throughout Europe" Stein-Callenfels died. On his deathbed he bequeathed Eksip to the brother of Matthew Richartz, who, in turn, made Matthew the "sole proprietor and distributor of this valuable preparation in America." Eksip comes in tablet form, and the price asked is $6 for 200 tablets. The directions are to take two or three tablets a day. The advertising booklet states that the diabetic may even eat candy if he feels impelled to. There is the usual batch of testimonials.

"When you order and take 'Eksip' as directed, no diet list whatever is given. You are directed to eat what you need and to take the tablets as directed—that's all."

The only information regarding the composition of Eksip given by the exploiter is that it is compounded of herbs. When examined in the chemical laboratory of the American Medical Association, the tablets were found to consist of magnesium carbonate and starch, with


Only Genuine with this Trade Mark
Eksip
Matthew Richartz
Sole Distributor in the U. S. and Canada of Dr. Steen Callendels
NON-DIATETIC PREPARATION FOR DIABETES MELLITUS
"Eksip"
220 West 42nd Street, New York, N. Y.

a small quantity of an unidentified drug. Needless to say, the diabetic who relies on Eksip and abandons all attempt at dieting will have his life materially shortened.

Fulton's Compound.—This preparation is put out by a San Francisco concern that exploits two nostrums, Fulton's Diabetic Compound and Fulton's Renal Compound; the first, naturally, for diabetes, and the second for kidney disease.

The composition of the Diabetic Compound has, apparently, never been given in detail, although the manufacturers claim that it contains bitter wintergreen, boneset, dandelion and some other diuretic herbs, together with borax and saltpeter. The ambiguity of the statements regarding composition are more than compensated for by the very positive claims made for its curative action.

Some time ago an investigation was made of some of the testimonials published by the Fulton concern, both for the Renal Compound and the Diabetic Compound. As was to be expected, it was found that in most of the cases in which the patient had either Bright's disease or diabetes, he had, in due course, died. For instance, Mr. G. of California, whose testimonial saying that he was about well was published by the Fulton concern, was found to have died of "uremic poisoning from chronic diabetes." Mr. Z. of Iowa, whose testimonial stated that after taking thirty-one bottles of the Fulton preparation he was nearly ready to go to work, was found on investigation to have died of diabetes mellitus. Mr. D. of Oregon, who reported that he was feeling fine after taking thirty bottles of the Fulton preparation, was also found to be dead.

In 1917, the United States government seized a quantity of Fulton's Diabetic Compound and declared that the claim that this product was a remedy for diabetes was fraudulent, "in that no ingredient or ingredients in the product or compound were capable of producing the therapeutic effects claimed for it." The Fulton concern did not appear to defend its claims. The federal court condemned the preparation and ordered it destroyed, and charged the cost of the proceedings against the company.

Jamun Compound.—This alleged treatment for diabetes was put on the market by a Minneapolis company. The composition of the product, according to the published statement, seems to have varied at different times. What is called Jamun and Jamrosin Compound seems to be the chief drug, but nobody but the manufacturers know what it is. There is a certain likeness between the alleged formula of Jamun Compound and Expurgo (Sanol) Anti-Diabetes Compound, and it may be that the mysterious "Jamun" or "Jamrosin" is jambul.

Needless to say, Jamun Compound never cured a case of diabetes and never will.

Remlock 300.—This is a one-horse piece of quackery that seems to have been conducted by one George E. Remick, who does business under the trade name of Remlock Hills Laboratory, Denver, Colo.

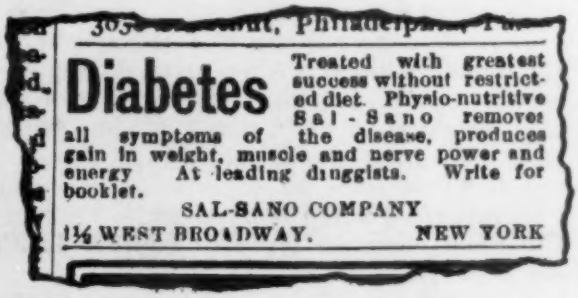
The preparation was advertised as an effective cure for diabetes. Because of these claims the federal government declared it a fraud. When it was analyzed in the government's laboratory, it was found to consist of 99 per cent water and a small amount of chalk and calcium (lime) chloride. Remick had the opportunity of justifying his claims, but instead pleaded guilty to making fraudulent claims and was fined $100 and costs.

Sal-Sano.—This preparation, which was put on the market by the Sal-Sano Company, a trade name for one Ernst Bischoff, New York City, was sold as a cure for diabetes, and like most of the nostrums in this class it was asserted that when used it was unnecessary to restrict the diet. The government declared that the claim that this was a cure for diabetes was fraudulent.

The Bureau of Chemistry at Washington analyzed the stuff and reported that it had essentially the following composition:

Common salt	19.9 per cent
Sodium phosphate	13.6 per cent
Baking soda	42.2 per cent
Glauber's salt	20 per cent

Bischoff made no attempt to justify his claim, but pleaded guilty and was fined $100.


Diabetes
Treated with greatest success without restricted diet. Physio-nutritive Sal-Sano removes all symptoms of the disease, produces gain in weight, muscle and nerve power and energy. At leading druggists. Write for booklet.
SAL-SANO COMPANY
1½ WEST BROADWAY. NEW YORK

Sanborn Treatment.—This nostrum or combination of nostrums is said to be the discovery of one Dr. Ida M. Sanborn of Chicago. Dr. Sanborn died in July, 1925.

It was first exploited by a Chicago lawyer, Charles S. Harmon, who claimed to have been

treated by the Sanborn method and cured of diabetes. Mr. Harmon died in December, 1924, of diabetes. Then the "cure" seems to have been turned over to Walter T. Bobo and Ernest D. Perkins of Battle Creek, Mich.

Walter T. Bobo also quacks it in other lines. For years he has sold a fake cure for goiter, both under his own name and under the trade name "W. T. B. Laboratories." The nostrum is sent through the mails to persons that Bobo never sees nor expects to see. If the preparation were not inert and worthless, it might easily be dangerous.

The Sanborn Laboratories is the name under which Bobo and Perkins now exploit this piece of quackery. Bobo has for years been connected with mail-order quack concerns. For a long time he was treasurer and general manager of the Peebles Institute, which sold a fake cure for epilepsy. Perkins has also been connected with the Peebles concern for some years. *The Journal* of the American Medical Association has evidence that the Sanborn treatment has been responsible for some untimely deaths of sufferers from diabetes.

"Rupture"

RICHARD WARREN CORWIN

IN FORMER days, before the cause of hernia was understood, the term rupture was applied, on the false conception that this condition was due to a tearing or rupture of the parts involved. Now we know that the path is paved for a hernia long before birth, and, in many cases, is present at birth.

On either side of the lower abdomen are two openings, or rings, through the abdominal muscles. These openings are weak spots in any abdomen. Frequently they are so large and lax that the more or less constant impact of the abdominal contents against them gradually causes them to enlarge, until finally a loop of intestine works its way through. Then the person for the first time learns that he has a hernia.

The finishing touch is often given during great exertion, and the victim believes that a particular strain was the cause. If, however, a person knew that the soil had long been prepared for just such an occurrence, he would not be surprised when it happens.

The most common types of rupture located about these rings are:

1. Congenital hernia, or hernia formed before birth.

2. Potential hernia, when the ring has been lax and weak for years. The ring usually gives way under continued strain and then forms a true hernia. My examination of men applying for manual work shows that weak rings exist on both sides in 30 per cent of the applicants, and on one side in 60 per cent. Under such circumstances it is not surprising that hernia is so common.

3. Indirect hernia, when the hernia is forced through the ring.

4. Direct hernia, when it passes through the flabby muscle adjacent to the ring.

Treatment of Hernia

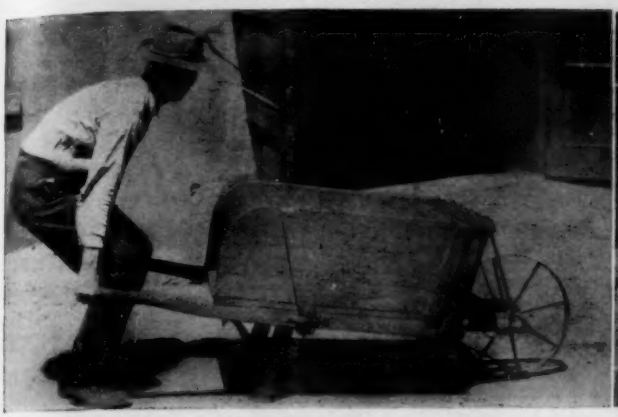
Since hernia is so common, how should it be treated to get the best results?

As congenital hernia is present at birth, the family physician will probably treat it in the hope that at this early age the opening may become sealed.

In cases of potential hernia much can be done to prevent the next stage, protrusion of the intestine through the ring. This can be done in two ways: (1) by developing the abdominal muscles through exercise, so that a normal support and protection may be given to the inguinal (groin) region, and (2) by using the abdominal muscles properly when at work.

Few know how to lift an object so as to prevent injury to the inguinal region; unfortunately, the few who know are often careless or indifferent.

One should lift with the muscles of the thigh, thus relieving from strain the back and



Lift this way,

and not this way.

abdomen. If one tries both methods of lifting, as shown in the accompanying illustrations, he will soon decide which is the better for relief as well as for strength.

Every hernia of the direct or indirect inguinal or groin type is a menace; so much so that if one is unprotected by a properly fitting truss, he is considered a bad insurance risk. The family physician will conscientiously advise a person as to what is best to be done; he will tell him if he believes a truss is proper in this particular case, and he will see that such a truss fits properly and does no damage by its presence. On the other hand, he will frankly say that certain hernias are not suitable for truss treatment. In fact, the wearing of a truss is decidedly dangerous in some cases and operation is far preferable.

Much is written in the advertising columns of newspapers and popular magazines about "curing hernia without the knife." When the true conditions are known, one realizes how exaggerated those claims frequently are.

The family physician lives in the community. He expects to stay there and consequently must be judged by his honesty of treatment. The traveling "rupture expert" is here today, gone tomorrow, and has nothing to lose, however extravagant his claims and however dishonest his practices.

THREE CASH PRIZES FOR "THREE BEST ARTICLES"

1. Name the three articles in the last twelve issues of HYGEIA *that have most appealed to you.*

2. Tell in not less than 50 words or more than 200 words why you consider these articles the best.

3. Give the subjects of three articles you would like to see appear in future numbers of HYGEIA.

Then put these three items in an envelope and mail them so that they will reach the Contest Editor, HYGEIA, 535 North Dearborn Street, Chicago, on or before April 1.

For the three best answers, HYGEIA will pay prizes of $15.00, $10.00 and $5.00. The contest is open to every one who reads HYGEIA.

Telling the Child About Sex

E. F. VAN BUSKIRK

SEX education of children is a parental duty. There is a growing consciousness of its importance on the part of many parents and an evident desire to prepare themselves to meet its obligations. Much is being said and written about health education, the significance of the preschool years, and mental hygiene. In all of these subjects sex education is slowly but surely finding its natural place.

All character education, of which sex education is a part, is difficult, because it has for its object the directing and controlling of human behavior. It involves the training not merely of the intellect but of the emotions and the will. Therefore, sex education consists of many different kinds of effort looking toward the implanting of habits of wholesome living and of incentives for socially desirable behavior. It is vitally concerned with the cultivation of emotional stability, habits of self-restraint and high ideals.

Ideals are "caught" rather than taught. In the sex education of children the conduct of parents is of prime importance. It is necessary for adults first to put their own conduct and ideals on a high plane and to learn to regard sex as intrinsically clean and wholesome. Then they can be of assistance in helping young people adjust themselves to their own sex natures and to the sex-social conditions in their environment.

Today's Young People No Different

Those persons who view with deep concern the behavior of the present generation of young people would do well to consider the fact that the basic qualities of human nature do not change. The same human emotions, desires, longings and means of obtaining satisfactions remain from generation to generation. From this truth it may reasonably be concluded that the differences that may be observed in the young people of today as compared with those of the previous generation are superficial rather than fundamental.

Recently many changes have occurred in the world about us, and attempts at readjustment to new conditions of living have been made necessary. The general use of the automobile, the entrance of women into business, the professions and politics, and the social and economic unrest produced by the World War have been felt in the home life of our nation as well as in other spheres of activity. There is reason to believe that our young people have been as successful in adjusting themselves to our changing world as have adults, and that, whenever they have failed, the responsibility for the failure rests with general social conditions rather than with the young people themselves.

We are living in a transition period regarding society's attitude toward sex. Most adults have been looking on the sex instinct as either wholly unclean or else too sacred to permit of scientific discussion. These attitudes are gradually disappearing, and there is evolving a saner and more wholesome point of view.

Now Face Sex Facts Openly

Our boys and girls are being taught in schools and colleges about the origin and continuity of life. They are coming to look on reproduction in much the same way in which they consider the other five or six life processes common to all plants and animals. If they study human behavior, they learn that the reproductive instinct, like other inborn behavior tendencies, has possibilities for good or ill depending on how it is used.

The increasing willingness to face the facts of sex in an open manner is hopeful rather than alarming, provided that parents are able to meet the challenge that this situation involves. The wider dissemination of information regarding sex imposes an obligation on parents to take a more active part than heretofore in this phase of the character training of their children.

From early childhood all the way into adolescence, parents inevitably influence the thoughts and behavior of their children in the realm of sex as well as in other phases of character development. It is not a question as to whether they want to do this; they cannot avoid doing it. Even if they sidestep all reference to the subject,

this very attitude produces an effect on the minds of their children.

The growth of a strong character depends on a complete personality development. This means that all the instincts, including sex, should find expression in desirable forms of conduct. There should be no overdevelopment of one or more of these innate tendencies at the expense of others. A well rounded personality can only be attained by degrees, the person passing through different behavior levels appropriate to his age and mental growth. Thus, to read into the behavior of children toward each other the attitudes and thoughts of adults is both unscientific and unwise. Parents should study the general laws of child development that they may better understand their own children and be able to discharge their full parental duties.

Some Helpful Books

Some of the books that parents are finding helpful in presenting the facts and ideals of sex to their children are listed here. Cady and Cady's "The Way Life Begins" is a book largely concerned with nature study. The last chapter of Van Buskirk and Smith's "Science of Everyday Life" contains some of the biologic material appropriate for use in later childhood or early adolescence. Blount's "Health as a Heritage" is intended for later adolescence. In general, the more recent textbooks in biology, botany and zoology are apt to contain material of the right type.

In the fields of psychology and child development, there are many books now available. McDougall's "Social Psychology" has a chapter devoted to a consideration of the sociological aspect of the parental instinct. W. A. White has written several books in the field of mental hygiene, which include a consideration of the sex instinct. M. A. Bigelow has recently prepared a monograph on "Adolescence," which is one of a series of booklets treating of health topics, edited by the National Health Council. B. C. Gruenberg's book on "Parents and Sex Education" presents the subject from the point of view of the parent of the preschool child, and the writer has just completed a short course for parents on "Sex and Character Education."

Children learn by observation, by instruction and by actual living. By setting them the right kind of example there is laid the foundation for habits of thoughtfulness, consideration for the rights of others and willingness to assume a reasonable amount of responsibility. These are characteristics of fundamental importance in general character development, as well as in the field of sex-social behavior. Nothing is of greater importance than providing a wholesome environment in which boys and girls may play and work together under proper direction and supervision.

In a brief treatment of the subject of sex education appropriate to childhood and adolescence, it is difficult to avoid the appearance of overemphasis. Sex is not the whole of life, and it should not be treated as such. There is danger in unduly stressing sex topics just as there is danger in omitting them from consideration. Sex instruction should not be isolated but rather should be presented in its natural relationship to different phases of life.

The little child naturally goes to the mother with all kinds of questions. Among these there will usually be some relating to the origin of life, especially as to the coming of the human baby. By answering such questions honestly in language suited to the child's understanding and by presenting the subject on a broad background of nature study, the mother will be rendering a service that may be the determining factor in spelling happiness rather than disaster in the child's later life.

May Influence Whole Life

Mental hygienists assert that many of the nervous disorders that appear in adolescence and in adult life can be traced to a wrong attitude toward sex, which could have been avoided through the proper kind of early training. Scientific investigation is making it evident that the trends of thinking established in the minds of little children are potent in affecting, either for good or ill, the whole course of their lives.

In later childhood further information regarding reproduction in the plant and animal worlds should be given. This should come as part of general biologic knowledge and should involve the acquisition of a scientific vocabulary, including such terms as sperm, egg cell, ovary, spermary and fertilization. The fact that reproduction in the higher forms of animals and man involves responsibility and sacrifices can be impressed on the mind of the child both by observation and through stories. This kind of teaching offers opportunities for implanting high ideals of conduct as well as scientific knowledge.

Up to early adolescence the content of sex education is practically the same for both boys and girls. In the early teens, however, the special contribution that the reproductive organs make toward physical and mental development should be explained. Adolescent boys and girls should learn about the hygiene of the reproductive organs of their own sex just as they learn about other parts of

their bodies. The outstanding mental characteristics of the other sex should not be omitted. If such teaching is carried on tactfully, it will contribute to self-respect and to a mutual understanding and sympathy between the sexes that will be of lifelong value.

In the later adolescent period, when the thoughts of young people normally turn toward marriage and the establishment of homes of their own, there are facts in the fields of eugenics, heredity and disease prevention that they should understand. They should know something about the history of marriage, and why it is generally agreed that monogamy—the "one man and the one woman" form of matrimony—is the type best fitted to develop the highest kind of personality and to insure the welfare of future generations.

Community problems in the field of sex should receive some attention, so that these future citizens may be able to distinguish practical plans for human betterment in the field of social hygiene from those that are visionary and impractical. The study of history, biography and general literature offers splendid opportunities for a better understanding of sex-social behavior.

All right-minded parents want to do everything within their power to contribute to the present and future happiness of their children. When once they become clearly conscious of the vitally important part that the sex instinct, properly controlled and educated, takes in contributing to human happiness and well-being, they will be desirous of meeting their obligations and privileges in this field of character training.

NOTE: The books mentioned in this article may be obtained in most public libraries or from the following publishers:

THE WAY LIFE BEGINS. By B. L. Cady and V. M. Cady. Price, $1.00. American Social Hygiene Association, 370 Seventh Avenue, New York. 1917.

SCIENCE OF EVERYDAY LIFE. By Van Buskirk and Smith. Price, $1.60. Houghton Mifflin Company, 4 Park Street, Boston. 1925.

HEALTH AS A HERITAGE. Blount. Price, 80 cents. Allyn & Bacon, 50 Beacon Street, Boston, or 1006 South Michigan Avenue, Chicago. 1924.

SOCIAL PSYCHOLOGY. By McDougall. Ed. 4. Price, $1.75. J. W. Luce & Co., 212 Summer Street, Boston. 1921.

ADOLESCENCE. By M. A. Bigelow. Price, 30 cents. Funk & Wagnalls Company, 354 Fourth Avenue, New York. 1924.

PARENTS AND SEX EDUCATION. B. C. Gruenberg. Price, $1.00. American Social Hygiene Association, 370 Seventh Avenue, New York. 1923.

When Mother Love Is a Stumbling Block

INTEREST and love alone on the part of the mother are not enough to assure success in handling the innumerable problems met with in the management of children, says Dr. Douglas A. Thom in Child Management, a recent publication of the Children's Bureau.

The very love of the mother for her child may be the stumbling block that prevents her from successfully fulfilling the obligations of her parenthood. This love is invariably associated with excessive worry, anxiety, and at times, definite fear, which prevent the most intelligent approach to many problems of childhood.

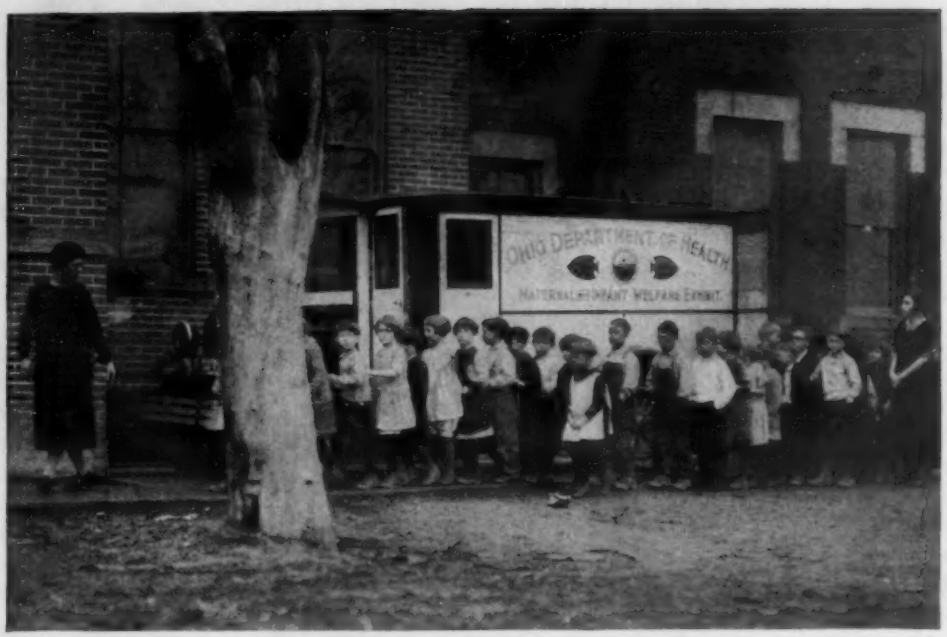
Oversolicitude on the part of parents may put the child in an entirely new setting. Children may become self-centered and develop innumerable imaginary complaints simply because illness is looked for and any existing ill health is exaggerated.

Mary, at 7, dominated the entire household. Mother faithfully fulfilled her slightest wish, fearing to cross her lest she become ill. Her sisters patiently shouldered her share of home duties and quietly gave way to her at every point in order to avoid, if possible, the almost inevitable outburst of temper which was so upsetting to the household. Her ready excuses for all occasions were, "You mustn't mind what I do; you see I've been sick," or "I'm not strong enough to do that 'cause I've had paralysis." It is true she had lived through more than her share of illness and was accustomed to admiration and interest from doctors to whom she was frequently shown as an unusual case.

Her "alibi" of ill health helped her over many difficult places in school, and at home special concessions were made for her; she was excused at every turn. Her whole life seemed built about this desire to hold the center of the stage.

Through a radical change of attitude on the mother's part this little girl, who was fast developing into a chronic complainer, has now become a hearty, normal youngster, gayly competing with her sisters in "helping mother," trying each week to learn to do one new task independently, and striving toward an ideal of robust good health rather than desiring the rôle in life of "interesting invalid."

After a little judicious neglect and ignoring, the alarming physical symptoms, which so greatly troubled the mother, vanished. After determination by physical examination of the child's condition, an appeal was made to her ambition and pride. Her desire for attention and wish to excel were turned away from the goal of ill health. With the encouragement of physician and mother she is now standing on her own feet, and learning to face life as it is.



Down the road came the lower graders from another school building.

Leaves from the Diary of a Healthmobile

H. E. KLEINSCHMIDT

STRANGE cargo for me to be carrying—health! Ours is a family of motor trucks noted for speed and power. On city streets and state highways you will find my relatives swiftly bearing ton-loads of all sorts of humble commodities that people want delivered quickly. But I, luckily, have fallen into the hands of a pair of health gypsies bent on carrying scraps of the gospel to the remote corners of the state.

The factory turned me over to them bedecked in a coat of immaculate white, emblazoned with shining gold letters saying "Ohio Department of Health." But I've about given up my fastidious notions, for the quick jumps I am obliged to make from school to grange to church and to other rural meeting places, through snow and rain, dust and mud holes, make it impossible to maintain that fresh, school girl complexion.

Sandy, the motion picture operator and my driver, is often put to it to get me there, but so far I have never failed him. His partner, the doctor, who does the talking and who is a stickler for punctuality, also seems to have confidence in me, for often he shares the seat with Sandy when time and space must be annihilated.

Inside I carry Tillie, our four-cylinder automatic electric generator, for we go where local current is either wholly absent or of undependable voltage. With Tillie I share my supply of gasoline. Two motion picture projectors, about fifteen reels of film, endless lengths of wire cable, crates of posters and numerous odds-and-ends, all snugly packed, complete my cargo of health.

You should see my triumphal entry when I pull up alongside a country schoolhouse, for example. With mouths agape and with eyes shining, the children crowd around to watch every move of Sandy and the doc as they set up the machinery for a show. Eager boys willingly lend a hand to unload the projector and later proudly explain to their fellows just how the machine works. Curious farmers climb inside me and poke inquiring fingers and questions at Tillie, while their wives, encumbered with tots and babes-in-arms, admire my outside make-up and puzzle over the words "Maternal and Infant Welfare Exhibit." These folk are starved for a bit of amusement and thirsty for health knowledge. So the S R O sign, figuratively speaking, is called into service often enough.

We spend one week in a county under the auspices of the county health officer. Three shows a day is our usual schedule, though frequently the ambitious H. O. will slip in an extra show or two for an orphanage, a luncheon club or a neglected school. The health officer has, of course, carefully arranged the week's itinerary so as to reach the key points of his district,

and he pilots us about, making the most of his unique opportunity.

I'm keeping a diary, which, though incomplete and sketchy, will furnish me with interesting reminiscences when, because of sclerosed tires, valvular insufficiency, asthmatic cylinders and other symptoms of old age, I shall be relegated to the junk heap.

SEPTEMBER 15, 3 P. M., AT B——— CENTER

We glide noiselessly up to the new six-room schoolhouse standing in isolation on a knoll. Our meeting is to be in the basement. The windows have already been covered with roofing paper—obviously a tidy and painstaking job—and chairs and benches have evidently been gathered from the four corners. It is a beautiful Indian summer afternoon, too pleasant to be indoors, but the boys and girls who have been enjoying a recess crowd inside with Sandy as he hangs the bed sheet. Down the road come the lower-graders from another school building, marching with sprightly step in twos. They crane their little necks as they pass me but dutifully file into the basement room.

A sprinkling of parents and teachers makes this a happy family gathering. Soon Tillie chugs out her electric juice, and the projector clicks out the reels. How the folk enjoy this unusual treat! They even listen to the health commissioner and the doctor as these two alternate in filling the pauses between reels, with talks.

"Jinks" is the first picture on the program. Apparently Jinks shatters the well-drilled discipline of the school, for shortly discreet chuckles and suppressed giggles give way to tumultuous honest laughter in which the superintendent and the teachers join. Next, "The Kid Comes Through" with its simple, human story captivates this audience as if it were a million dollar superdrama. The health officer is anxious to overcome some local opposition to vaccination, so "One Scar or Many," supported by an earnest verbal message, follows. Then there is a rousing song and a sweep of fresh air through the stuffy room, after which follows a potpourri of short unrelated subjects, the reel being designated as "The Trailers."

They want more, but we must hasten on; besides, the horse-drawn busses are already banked along the road, so with many a laugh, a few personal questions and expressions of appreciation, we pack up and chug away.

SEPTEMBER 19, NOON, AT A———

This is an industrial city of some 10,000 population. A bond issue for a tuberculosis sanatorium is pending in this county. Bond issues are unpopular in these days of mounting taxes. We are trying to help the county health officer, who realizes how much is at stake. While he spreads propaganda in the three larger cities, we "do" the rural sections. Today, however, he has squeezed in an engagement for us with the Kiwanians of A———, whose influence is powerful. They meet at a picturesque little country club located on the outskirts of this hustling manufacturing town. And they serve a superb luncheon. These fellows are high-calibered business and professional men, as critical and exacting as the magnates of a metropolis.

Sandy has had to hustle away with me to the next assignment, but the projector, previously set up and all ready to run, has been left in charge of the doctor. During the luncheon the chairman explains to him that "these men won't stay a minute later than 1 o'clock" and urges brevity. The doctor, called on to speak at 12: 45, snaps into it, setting forth the salient reasons why the county should erect the sanatorium. Promptly at 12: 55, he winds up with an "I thank you," quietly twists the switch of the projector and casually remarks that those who care to see the picture, "Take No Chances," are welcome to stay. At 1: 15, not a man jack has departed. Questions and interviews keep him almost another half hour.

By the way, the bond issue carried the following week, two to one.

OCTOBER 5, 2 P. M., AT H———VILLE

We are directed to the village church, a small frame structure. It is an unpromising looking place for movies, until the janitor guides Sandy up a ladder into the belfry; there, hidden away where bats and the tolling bell once held sway, he finds a complete fireproof projection booth installed, in which is a machine of ancient vintage and forgotten pedigree but apparently workable. But, warns the janitor, no one is permitted to touch the apparatus. To set up our own portable booth and to make ready would consume the better part of an hour, and we have only a few minutes. Already our audience is gathering.

"Who operates your machine?" Sandy demands.

"Joel so-and-so," says the janitor, "but he's not here—on his farm likely."

Hastily the health nurse who accompanies us today is dispatched with her Ford to round up Joel. He, when found in his potato patch, is willing to come but takes time to change his farm togs for a boiled shirt and Sunday trousers. His arrival, though delayed, brings joy to Sandy's heart, for our own projector has been acting uppish of late. Besides, here is an understanding pal—a fellow craftsman. They mount the aerial booth and make ready. Together they chat in the lingo of the cinema and swap professional secrets, as Joel grinds out the reels.

Does he frequently show pictures here? "Not very often—can't get good pictures; so few are

moral and uplifting, and cheap enough. Well now, there were some good ones last winter. There was that one called 'The Man God Forgot' —now there was a gripping message!—and 'Uncle Tom's Cabin'—powerful, stirring. And, say, mister, when we had 'Over The Hill to the Poorhouse,' honestly, I cried so hard I couldn't see to thread up the last reel."

In an hour the pictures have run their course. What matter that they shivered and shimmied on the screen as all films did in the good old nickelodeon days; we too have "gripped" this audience of townspeople.

Doc and Sandy thank the agrarian operator and ask what they owe for his services. "Not a cent! No sir. Them pictures was elevating and instructive, and we want 'em again."

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NOVEMBER 22, 7:30 P. M., AT L——— GRANGE

A sudden cold snap and a blizzardy snowstorm make this a difficult night to travel. I skid about on the thin ice covering the hard road like a Turkish dancing girl. Sandy drives slowly, and the doc nervously peers out, though he cannot see well through the thick coat of snow covering his side of the wind shield.

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Bye and bye we are hailed by a pair in distress. They climb aboard and explain that they burned out the bearings of their car as a result of trying to drive home with a frozen radiator. Can they direct us to the L——— Grange? They have never heard of it; though they live five miles down the road in the direction that we are going. When they ask to be let off, they naively suggest that perchance we had already passed our destination before we picked them up. The confounded scoundrels!

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"Sure, stranger, the grange sets up on a hill five miles north."

So we did pass it, and those grafters misled us deliberately in order that they might be served! Angrily, Sandy steps on the gas, but we are on a steep, icy incline and though my wheels spin furiously I can't budge forward an inch. Finally, the doc, who is pushing behind, smells my tires burning and yells to Sandy to stop. Men summoned from the service station get behind and help push. Once more I feel the wheels gripping; the doctor makes a dash for the running board and clambers on.

At last we reach the grange, now brightly lighted up and surrounded by autos. Of course we can't miss it! The boys hook up, but alas, Tillie the generator, refuses to pull a stroke. After much fumbling with matches, Sandy finds a break in the connections and, with cold-stiffened fingers, makes a temporary repair.

Our farmer audience has been most patient, but the better part of the evening is gone, and we have time only for two short reels. However, they enjoy the show and, by their comments and questions, show real intelligence, especially about such things as the tuberculin testing of cattle. Genial folk, these. Very cordial and appreciative. Our exasperating mechanical troubles they pass off lightly, as if they were accustomed to such trifles. Then we go back through the cold and snow to our hotel.

OCTOBER 15, 10 A. M., AT GERMAN SETTLEMENT

A two-room parochial schoolhouse, a high-steepled frame church and a parsonage surrounded by neat farms are the only evidences of the "settlement," as we drive in this fine autumn morning. A closely knit independent group of farmers, the health officer says, controls this area. He has succeeded by shrewd but honest maneuvering in overcoming some of their prejudices against the "extravagances" of county officialdom and "interference" with their unobtrusive customs, and now he enjoys a fair measure of cooperation in his health program. He bids the boys not to underrate the importance of coming to this apparently insignificant

and he pilots us about, making the most of his unique opportunity.

I'm keeping a diary, which, though incomplete and sketchy, will furnish me with interesting reminiscences when, because of sclerosed tires, valvular insufficiency, asthmatic cylinders and other symptoms of old age, I shall be relegated to the junk heap.

SEPTEMBER 15, 3 P. M., AT B——— CENTER

We glide noiselessly up to the new six-room schoolhouse standing in isolation on a knoll. Our meeting is to be in the basement. The windows have already been covered with roofing paper—obviously a tidy and painstaking job—and chairs and benches have evidently been gathered from the four corners. It is a beautiful Indian summer afternoon, too pleasant to be indoors, but the boys and girls who have been enjoying a recess crowd inside with Sandy as he hangs the bed sheet. Down the road come the lower-graders from another school building, marching with sprightly step in twos. They crane their little necks as they pass me but dutifully file into the basement room.

A sprinkling of parents and teachers makes this a happy family gathering. Soon Tillie chugs out her electric juice, and the projector clicks out the reels. How the folk enjoy this unusual treat! They even listen to the health commissioner and the doctor as these two alternate in filling the pauses between reels, with talks.

"Jinks" is the first picture on the program. Apparently Jinks shatters the well-drilled discipline of the school, for shortly discreet chuckles and suppressed giggles give way to tumultuous honest laughter in which the superintendent and the teachers join. Next, "The Kid Comes Through" with its simple, human story captivates this audience as if it were a million dollar superdrama. The health officer is anxious to overcome some local opposition to vaccination, so "One Scar or Many," supported by an earnest verbal message, follows. Then there is a rousing song and a sweep of fresh air through the stuffy room, after which follows a potpourri of short unrelated subjects, the reel being designated as "The Trailers."

They want more, but we must hasten on; besides, the horse-drawn busses are already banked along the road, so with many a laugh, a few personal questions and expressions of appreciation, we pack up and chug away.

SEPTEMBER 19, NOON, AT A———

This is an industrial city of some 10,000 population. A bond issue for a tuberculosis sanatorium is pending in this county. Bond issues are unpopular in these days of mounting taxes. We are trying to help the county health officer, who realizes how much is at stake. While he spreads propaganda in the three larger cities, we "do" the rural sections. Today, however, he has squeezed in an engagement for us with the Kiwanians of A———, whose influence is powerful. They meet at a picturesque little country club located on the outskirts of this hustling manufacturing town. And they serve a superb luncheon. These fellows are high-calibered business and professional men, as critical and exacting as the magnates of a metropolis.

Sandy has had to hustle away with me to the next assignment, but the projector, previously set up and all ready to run, has been left in charge of the doctor. During the luncheon the chairman explains to him that "these men won't stay a minute later than 1 o'clock" and urges brevity. The doctor, called on to speak at 12: 45, snaps into it, setting forth the salient reasons why the county should erect the sanatorium. Promptly at 12: 55, he winds up with an "I thank you," quietly twists the switch of the projector and casually remarks that those who care to see the picture, "Take No Chances," are welcome to stay. At 1: 15, not a man jack has departed. Questions and interviews keep him almost another half hour.

By the way, the bond issue carried the following week, two to one.

OCTOBER 5, 2 P. M., AT H———VILLE

We are directed to the village church, a small frame structure. It is an unpromising looking place for movies, until the janitor guides Sandy up a ladder into the belfry; there, hidden away where bats and the tolling bell once held sway, he finds a complete fireproof projection booth installed, in which is a machine of ancient vintage and forgotten pedigree but apparently workable. But, warns the janitor, no one is permitted to touch the apparatus. To set up our own portable booth and to make ready would consume the better part of an hour, and we have only a few minutes. Already our audience is gathering.

"Who operates your machine?" Sandy demands.

"Joel so-and-so," says the janitor, "but he's not here—on his farm likely."

Hastily the health nurse who accompanies us today is dispatched with her Ford to round up Joel. He, when found in his potato patch, is willing to come but takes time to change his farm togs for a boiled shirt and Sunday trousers. His arrival, though delayed, brings joy to Sandy's heart, for our own projector has been acting uppish of late. Besides, here is an understanding pal—a fellow craftsman. They mount the aerial booth and make ready. Together they chat in the lingo of the cinema and swap professional secrets, as Joel grinds out the reels.

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group with our expensive equipment and assures them that the measure of appreciation will compensate for small numbers.

We are greeted by a solemn, friendly, bespectacled "professor," who bids us enter this old-fashioned institution of learning. Stepping into the vestibule, we come on rows of humble wraps neatly hung on hooks and an endless line of sizable dinner pails on shelves. The entire school is dismissed for a recess, in order to give us an opportunity to set up our apparatus.

Another "professor" of rotund frame, bald head and austere countenance fills and lights his pipe and oversees the children outside, having first warned them that they are to "exercise but not to play," on the theory, no doubt, that games during school hours will be construed as a relaxation of discipline.

Several boys fetch horse blankets from the rigs that carried them to school, and these are tacked onto the window frames of the upper room to darken it. The professor's desk, weighted down with a ponderous, well-worn Bible, is moved to a corner. Where the rod that is not spared may be concealed, we do not discover. Now the pastor of the flock arrives. He inspires the awe of the children and commands the respect of Sandy, the nurse and the doctors as he graciously and formally introduces himself.

When all is ready, the children, eager but consistently decorous, file in and the show begins. The doctor, who understands the Teutonic mind, sandwiches in between reels some neat remarks. Seldom has he seen a more orderly roomful of children. Yet they are not dull, for they seem to drink in his remarks and gobble up the pictures. He wonders vaguely if, with this new era of joyous, unrepressed childhood, which most children now enjoy, we have not lost something of reverence, respect and devotion.

At the close of the last reel, the health commissioner asks if there are any questions. The solemn professor rises to say that the pictures were very instructive and declares that his children too are not unfamiliar with health chores; in evidence of which he submits testimony to the effect that some time ago he inquired of his pupils how many drank coffee, and only about a third raised their hands!

Now the pastor takes the platform. He curtsies to the doctors, hopes that he may be excuse if he speaks a liddle German, and forthwith launches into a mixed-dialect sermonette, taking for his text what we thought was a jolly health lesson.

"You have seen, meine lieben Kinder, how this boy in the movies fell into the hands of evil companions. Ah! like the Bible says, böse Gesellschaft, loafering around at night—it ruins boys and girls! Ach! stay at home—bleibt zu Hause—meine Lieben. Obey your parents; the world is fulla sin. And these germs the doctor talked about: yes, they were sent into the world by God (he pounds the table and his eyes flash) because man sinned!"

He glances at the doctors for moral support. What can they do in this commanding presence but nod agreement? The doctor signals a warning look to Sandy, who, partly concealed behind the cannon-ball stove in the rear of the room, threatens to disgrace the entire outfit by splitting wide open with suppressed mirth.

Once on a long run I overheard the doctor argue that ideas presented visually make a deeper impression on the child mind than those conveyed by the spoken word. My knowledge of psychology is limited, but I devoutly hope the doc is right.

All Day Suckers

EDITH LOCHRIDGE REID

ON A recent shopping tour my errands took me to the toy department of a large store. As I stood waiting for my parcel, voices behind me attracted my attention. A woman was contemplating the purchase of a whistle for her little son, who already had one of the whistles in his hand.

"It won't blow, Mama," the child said.

"Let me see," replied the mother, putting the whistle in her own mouth. But she could not get a blow from it either, so she said to the clerk, "This one isn't any good."

"Let me see," said the clerk; "it was all right a moment ago, for a boy blew it." Then he, too, put the whistle to his lips, applied the right amount of power and achieved results that delighted the child. Having convinced herself that the toy was satisfactory, the mother paid for it, and the little boy went off blowing both whistle and its accumulation of germs.

"It won't blow, Mama," the child said.

Putting Money in the Mouth

This indiscreet incident started a train of thought. All the rest of the day I observed various occurrences that made me want to exclaim, "Why do they do it?"

A well dressed and evidently prosperous woman cashed some travelers' checks at the bank window next to me, and she held the paper money in her mouth while she fumbled with the catch on her purse.

A messenger boy held a letter in his mouth while he adjusted the clip on his ankle before mounting his wheel at the curb.

At lunch the waiter wet his thumb when he tore off my check from his pad; he appeared utterly oblivious to my expression of disapproval. At a table near me a woman picked up her plate of salad, smelled it, beckoned the waiter and said, "This has shrimp in it; bring me straight combination vegetable." As the salad had not been otherwise touched, it was set on the shelf to be served again.

These are not unusual or exaggerated cases, for I did not happen on a day for my observations when folk were especially insanitary. One wonders why with all the good advice and propaganda and civic measures for protection these little occurrences still take place.

In a grocery store a customer may often be seen smelling cheese or fruit and putting it back on the counter. Why in the name of sanitation must we shop with our noses?

Another habit of thoughtless women—I speak of women because they do 85 per cent of all shopping—is to take a piece of wool material and rub it on the face to determine the quality of wool, or moisten their fingers to test a corner of linen. Yes, they do it in this so-called civilized age, just as if they had never heard of germs.

Wetting Fingers to Turn Pages

One needs only be seated in a public library for ten minutes to see persons wet their fingers to turn the leaves of books. The pencil in the mouth habit is not by any means confined to children. I saw a woman borrow a pencil from her huckster to write a check, and she stuck it in her mouth twice while using it. In this case the habit and pencil were both indelible, which was a double hygienic offense.

A mother will be wheeling baby along the street when his rattle drops out of the cart. Blithely she picks it up, hands it to its owner and the baby immediately proceeds to chew the

place at which he left off when interrupted by his loss. And these are not always the mothers from homes of questionable sanitary environment. They are the thoughtless ones who are busy with their own affairs or engaged in conversation with a friend.

Our industries, such as bakeries and dairies, have done a great deal to help housekeepers stress sanitation. But some of these homemakers defeat the purpose by not cooperating and doing their share.

Keeping Up with Baker and Dairyman

"What did you do with that paper off the bread?" I heard a mother ask her small daughter when I was a guest in the home.

"I threw it in the fireplace," replied Betty.

"What did you do that for?" asked the mother. "I've told you always to fold those up and put them in the drawer to wrap school sandwiches in."

"Yes, I know you did, mother," protested Betty, "but our teacher told us that wasn't a nice way to do. The bread papers are clean on the inside, but the outside has touched dirty counters and the delivery boys have sometimes dropped the bread on the sidewalk. If we don't get the right side touching our sandwiches, we may eat all those germs. The teacher says the baker tries to keep the bread clean for us, but he can't be sure the paper is clean outside when it is handled by so many people."

"I never thought of that," said the mother, "and it is not much of a saving anyway, for a roll of waxed paper doesn't cost a great deal."

We expect sanitary paper covers on our milk bottles and then invite our own doom by neglecting to wipe off the edge of the bottle before pouring the fluid over it. All these things seem to come under the characteristic of common sense, which we all include among our qualifications; yet through haste or absolute carelessness we neglect to apply it where it is most important to the health of those we love best.

A little boy came to school during an active health crusade without having brushed his teeth.

"How did this happen?" asked the teacher in surprise, for Phillip had been one of her most loyal adherents to the new rule.

"George went away over Sunday and took the toothbrush," was the explanation.

Of course, we smile at this as an extreme case in these enlightened times, but the very folk who smile may be allowing several children in the family to use a common nail file, hair brush and comb and roller towel.

Mothers should teach the right use of handkerchiefs. I met a little boy on the street with a wad of handkerchief in the same hand as his after-school sandwich. As I knew him fairly well, I said, "Put your handkerchief in your pocket, dear, until you get through lunching."

"It doesn't pay," he said frankly, "for I have such a bad cold I have to keep it handy."

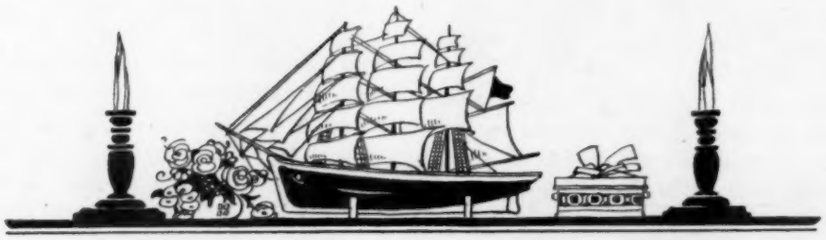
So that was that!

Spreading Germs Through Paper Clips

Office workers are often offenders against hygiene by holding wire paper clips in the mouth. These come on letters from great distances and are passed about from mouth to mouth by being laid on the desk and picked up at intervals by different persons.

I have seen dressmakers hold pins in the mouth, take them out, lay them on the floor and later offer them when an assistant asks for the garment, the assistant in all probability going through the same process of "eating" them.

These are by no means all of the thoughtless acts relating to matters sanitary. Shall we desist? For the sake of economy and hygiene, we should.



Safe Reducing Diets

I Reduce—*A Department for the Would-Be-Thin Readers of HYGEIA*

W. D. SANSUM

CERTAIN fundamental principles should govern diets. Every diet must contain ample calories, protein, bulk, alkaline-ash foods, sugars and starches, mineral foods, vitamins and water. Reducing diets should violate none of the following four principles:

1. Reducing diets must contain adequate amounts of the sugars and starches properly to burn the body fat that is lost in the weight reduction and the small amount of fat in the diet. The very frequent violation of this vital principle often results in a serious type of acidosis (increased acidity or, rather, decreased alkalinity of the blood).

In obese persons who are attempting to reduce, the failure to burn fat properly is usually due to a lack of sufficient sugar in the diet. Reducing diets should contain at least one part of sugar or starch for each part of fat in the diet and for each part of fat which is lost from the body as weight. The higher the ratio of carbohydrate to fat, the safer is the reducing procedure and the less sluggish will the patient feel.

2. Reducing diets must be as free from fat as possible, for it is only on such diets that adequate carbohydrate can be given to balance the fat lost as weight and at the same time to make a sufficient limitation in the total caloric intake.

What Is Fat?

The chief sources of fat in the diet are whole milk, butter, cream, cheese, fat meat, bacon, lard, suet, nuts, egg yolks and olive and vegetable oils. These sources of food have come to receive greater attention than ever before. The prize dairy cows are the ones that give the highest percentage of cream. People are not content with rich whole milk, but demand butter and cream, forcing the farmer to feed the skim milk to his pigs. Fat livestock takes the blue ribbons and brings the highest market price. The olive growers of the world have been unable to supply the demand for table oils and large quantities of oils are now extracted from corn, cottonseed and coconuts.

Rich (fat) cooking is in great demand. When potatoes are eaten, they are creamed, garnished with butter and smothered with rich gravy. Many desserts are served with whipped cream. Salads are usually served with French or mayonnaise dressing in which large amounts of vegetable oils are used. The housewife buys the fattest young chickens and turkeys, garnishes them with strips of bacon and bastes them with butter. Lard alone, or lard with butter, is used in the making of all kinds of pastry and in the frying of food.

Fat has the highest caloric value and is served in the most concentrated form of any food. One small pat of butter is equivalent in food value to a fairly large potato. Fat is the most difficult of all foods for the body to digest, absorb and burn. It frequently causes indigestion. In burning, its energy is released slowly so that it may very well be likened to a low test gasoline. Persons who eat too much fat soon become sluggish both mentally and physically; the more fat they eat the lazier they become, and the lazier they become the more rapidly they gain weight.

We become too fat because we eat too much fat, exercise too little or both. Occasionally a person is found with some glandular deficiency, such as hypothyroidism, but even these persons

FOOD FOR THE FAT

1. Modern diets in general contain too much fat.

2. Persons usually become obese from eating too much fat, exercising too little or both.

3. Reducing diets should violate none of the fundamental diet principles.

4. The diets should contain an adequate amount of carbohydrates—the sugars and starches—properly to burn both the limited fat in the diet and that which the patient loses from his own body; otherwise the serious acetone type of acidosis will certainly occur.

5. The diets should be as free from fat as possible.

6. The diets should be surprisingly low in caloric value, because of the difficulty with which obese persons lose heat from their bodies.

7. All fat persons should take an adequate amount of physical exercise.

do not become too fat without an overconsumption of fat food.

3. Strict reducing diets must be surprisingly low in food value, having not over 1,000 to 1,200 calories. This may seem to violate the law calling for adequate calories, but the necessary difference is derived from the burning of body fat. The total caloric intake must be less than the total burned in order to cause the desired loss of weight.

Fat persons require surprisingly low caloric diets. Whereas a normal man or woman needs from 2,200 to 2,500 calories a day for ordinary work, a fat person needs very much less food. The extra thickness of the layer of body fat forms an effective insulating coat, and heat is lost from the body very slowly. This principle is used to advantage when hot water and steam pipes are covered with asbestos. Fat people may very well be likened to fireless cookers, and every one knows that the heavily insulated fireless cookers require comparatively small amounts of heat for the cooking of food. This explains why fat persons can maintain their weight on very little food and why diets must be reduced so low before they can lose weight.

4. An adequate amount of exercise must be taken. One should walk not less than five miles a day and if convenient even more. It is usually necessary to begin training by walking a few blocks the first day and then adding an additional block or two each day.

May Reduce Safely on This Diet

Experience has demonstrated the safety of a 1,000 calory diet as free from fat as possible, containing ample amounts of protein, in the form of skim milk or buttermilk, cottage cheese and the leanest of meats, with fairly large amounts of carbohydrate in the form of the low percentage fruits and vegetables.

For instance, not long ago a girl, aged 17, weighing 237 pounds, followed this 1,000 calory diet. On this diet she did efficient work in the hospital kitchen, and she was promised that if she would walk 5 miles a day she would probably lose 10 pounds a month with safety. Soon feeling better on this low diet, she increased her walking to 10 miles a day, and at the end of the first month she had lost 20 pounds. Twenty-four hour specimens of urine were saved each day, and at no time during this month were there any evidences of any type of acidosis.

A satisfactory reduction may usually be brought about in moderately obese persons provided they will eliminate as much fat as possible from their diets, continue to take their usual amount of carbohydrate, and at the same time take adequate amounts of vigorous outdoor exercise. When patients are seriously overweight, a weighed or at least carefully estimated diet is the safest procedure.

In the following typical reducing diet, the portions are given in grams, ounces and in rough measure.

SAMPLE MENU OF A WEIGHED REDUCING DIET

	Grams	Ounces	Rough Measure
BREAKFAST			
Oranges	200	6⅔	2 small oranges
Egg	60	2	1
Bread	30	1	1 slice
Butter	5	⅙	1 square
Skim milk or buttermilk	200	6⅔	1 glass
Black coffee (no food value)			
DINNER			
Consomme (no food value)			
Roast beef	50	1⅔	¼ in. slice 2½ x 3½
Spinach	100	3⅓	3 h. tbsp.
String beans	100	3⅓	3 h. tbsp.
Asparagus and lettuce salad	100	3⅓	12 stalks and 2 leaves
Sliced peaches	200	6⅔	6 h. tbsp.
Tea (no food value)			
SUPPER			
Broth (no food value)			
Cottage cheese	75	2½	3 h. tbsp.
Baked tomato	120	4	1 medium
Cauliflower	100	3½	3 h. tbsp.
Lettuce salad	80	2⅔	⅓ head
Raspberries	200	6⅔	6 h. tbsp.
Skim milk or buttermilk	200	6⅔	1 glass
Tea (no food value)			

Carbohydrate, 133 Gm.; fat, 26 Gm.; protein, 68 Gm.; calories, 1,038.

Reducing Bust

To the Editor:—I am 18 years old, 5 feet 1 inch in height, and weigh 135 pounds. My bust is unusually large. Is there anything I can do to reduce it?

L. R., Iowa.

Answer.—If weight is lost by means of a proper diet, it will not be regained while the same plan of diet and exercise is continued. No method is advisable for reducing the bust alone. It is generally reduced when the total weight is reduced.

Calories in Doughnuts

To the Editor:—How many calories shall I eat to keep the same weight? I am 5 feet 3 inches tall, weigh 115 pounds and am 16 years of age. How many calories have plain doughnuts, without jelly, and pancakes?

P. K., Ohio.

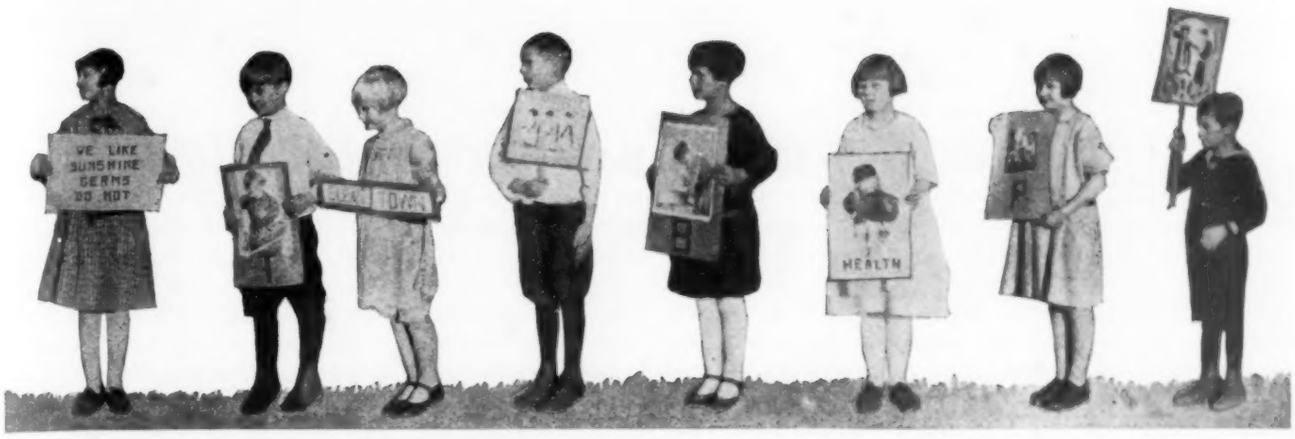
Answer.—One authority gives the food value of doughnuts as 6.7 per cent protein, 53.1 per cent carbohydrate, and 21 per cent fat. This reckons up to a total food value of approximately 430 calories per hundred grams, or roughly about 400 calories for every 3 ounces of doughnuts. It must be remembered that doughnuts vary in size; also their composition may differ considerably as prepared by different cooks, especially with reference to the amount of fat in them.

Even when the age, weight and height are known, it is impossible to state arbitrarily the number of calories needed. Possibly 2,500 calories might be a rough guess, but only experience can decide the diet on which the inquirer can actually gain or lose weight.

Voice Lessons to Blame?

To the Editor:—I am about 25 pounds overweight. Most of my extra weight is on my hips and abdomen. I am teaching public school music, and it seems to me that since I have taken voice lessons I have gained weight. T. L. S., South Dakota.

Answer.—Voice exercises might lead to a gain of weight by stimulating the appetite and digestion. Regulation of the calories in the food is the only rational way of governing weight, but no arbitrary figure can be stated for the needs of an individual person. Differences in size, activity and various other physiologic factors create a wide difference in food consumption.



A Parade of Clean Children

KATHERINE L. CARBER

WHO EVER heard of a child who did not enjoy a parade? Especially does he enjoy it if he has a share in it. During National Education Week, as a part of the program carried out on Health Day, there was a parade of clean children in the Balch School, Norwood, Mass. Children who paraded were in the group classified as habitually clean children rather than those who were scrubbed for the occasion.

The parade was participated in with overwhelming enthusiasm. A majority of the children belonging to the school of 800 were in the line of march.

Lines were formed in Playroom Field and were led by first grade children, followed by children from every class in the six elementary grades and the special class. Banners carried related to health in general, bathing, care of the teeth, care of the hair, neatness of dress, value of sunshine, and special health club activities.

The line of march was through corridors, up and down stairways and through classrooms. These were properly placarded, the names of teachers being used in connection with places. From Playroom Field the line of march led up Stairway Hill, around Ellis Circle, along Ryan Path and Mann Way to McCabe Road, Mitchell Avenue, Hollo-Way and Main Street, over Stone Wahl to North Hadley. From here it proceeded through Lydon Village to East Hadley, along Stairway Trail to Flaherty Town, Main Street, past Gould Hospital, Wade Place and Fokestone to Keefeboro, and thence to Porter Village, Vanceboro and Rogersville, along Dalton Way to Beverly Farms, along Morse Avenue to Fraserville and Hollo-Way, down Stairway Hill and back to Playroom Field.

Here the marchers were reviewed by the school nurse, the state nurse, the physical director, a mother, and a voluntary helper in health work.

Many teachers are doing splendid health work in the Norwood schools. From various sources they obtain suggestions for carrying on health work, but in spite of these they become discouraged, for there must be many incentives to children in health work as in all other branches.

The parade of clean children was not only an incentive to children to live up to health rules, but it was an encouragement to the teachers to find that so many children were qualified to take part in such a parade.

To onlookers it was an interesting and impressive sight. The momentum that is gained from large numbers participating in such an activity carries the movement forward.

The Search for a Cure for Tuberculosis

ESMOND R. LONG

CONSUMPTION is always with us. As a rule it develops slowly and insidiously; seldom is the outburst stormy. If it kills, it kills slowly—so slowly that the patient and his friends usually have time for calm and judicial reflection on means of ending the disease favorably. The burden of their thoughts is, why in the world don't these doctors busy themselves and find something to speed up a cure?

All that can be said in answer is that if success has not yet been achieved in this field, it is not for lack of effort on the part of the physician. Impressed as he is by the success attending treatment in other great scourges, particularly malaria, syphilis, diphtheria and certain kinds of dysentery, he has set out along many a road that seemed to promise a cure, at the end only to be baffled.

Sometimes for a few exciting months success has seemed attained; yet remorselessly the disease has proceeded to take its toll, in spite of these discoveries, and reluctantly each latest cure is abandoned.

Good Hygiene Best Treatment Known

On the other hand, the doctor is far from utterly helpless. From the days of Rome and no doubt long before, one treatment has always been known to meet with some success. That treatment is good hygiene. Mixed even with the superstition and misguided efforts of an energetic ignorance that characterized medical practice in ancient and medieval times was always the assurance that some benefit would follow if the patient could be removed from the environment that led to his illness and provided with a better one.

What constitutes the best environment for tuberculosis? One group thinks of a particular kind of climate, a dry one in the opinion of most, the seashore in the judgment of a few. To some it means a regimen in which all muscular effort is renounced, and the patient lives a purely vegetative existence. It is not long, however, since a much more vigorous course, with an abundance of exercise, was commonly prescribed. Only slowly did it permeate most minds that before a man could take this cure he had to be strong enough to stand it.

Today, treatment is somewhat more standardized along rational lines. Rest and the avoidance of strain of every sort are recognized as the chief measures in attaining a cure, and they are supplemented with the best food available, much fresh air and sunshine, and exercise suitable for the individual case.

As the patient sees it, this is a negative sort of treatment, mostly don'ts and not enough do. It is undeniably slow and not altogether sure. The patient would like to see a curative agent with a good deal more punch to it. Unusual forms of rest, such as lung compression and forced limitation of expansion, and special hygienic measures, like sunshine in allotted doses, do not altogether fill the bill. Something that would kill the germ on the spot, without waiting for the upbuilding of the whole body, is what the patient would like to see.

And so would his doctor, his relatives and friends, his community and his government. Wealth, generously contributed by private and public agencies, and the entire time of many scientifically trained men have gone into the effort to stop the appalling toll taken by tuberculosis. A dozen first class medical journals published in several countries are devoted solely to reports of investigations and observations on this disease.

Some Form of Immunization Sought

In general, endeavor has been concentrated along two main lines of attack. First, the attempt has been made to develop in the body a specific power for acting on the germ of the disease, putting it out of the way of doing further harm, either by destroying it outright or by imprisoning it within some sort of lasting tissue barrier. This is the method of immunization of the body.

Besides this method a more direct means has been sought, the poisoning of the germ itself within the body. The effect of quinine on the germ of malaria, of mercury and arsenic on that of syphilis, and of emetin on the ameba causing one form of dysentery holds out hope for the discovery of something useful in tuberculosis, something that is poisonous to the tubercle bacillus in a concentration much lower than that required to poison its unwilling host. Many chemicals poisonous to the bacillus are known. Unfortunately they are likewise poisonous to man. The desirable compound is one not toxic for human cells but highly so for the invading bacterial cells.

Scores of proposals for the immunization of the person infected with tuberculosis have been made. All of them are indeed methods of improving an already existing immunization, for the infection itself has stimulated within the patient a type of tissue reaction that to some extent limits the progress of the disease. If it were possible to make this restraining response of the tissues more effective, it might be possible to hold the disease entirely in check. As a matter of fact, this restraint of spread has been more sought than the development of the so-called antibodies, which are foes of the germs.

In cholera and typhoid fever a type of immunity is developed in which destruction of the germs of these diseases takes place, with actual and often rapid dissolution of the germ. Nothing quite so spectacular is observed in tuberculosis, and most investigators would now be content if they could immunize in such manner as to wall off the bacilli where they could be left to die more slowly.

Of the many scores of immunizing methods advocated, only a few of those more recently put forth will be reviewed here. Whether some or all of these will prove to be of sufficient value to be retained on our list of valuable agencies against tuberculosis only time can tell.

Probably all of them have some value, under some conditions. All of the preparations advocated for developing an effective immunity in the patient with tuberculosis are variants of "tuberculin," which was introduced into the treatment of tuberculosis more than thirty years ago. They may or may not have some value in addition to their tuberculin action, but that at least must be conceded them. So far as tuberculin is of value, they are of value. And tuberculin in proper dosage was long ago proved to be of value in selected cases of tuberculosis. The important questions then are whether these new preparations are better tuberculins than we formerly possessed, and whether they do something that tuberculin will not do.

Dreyer's Preparation

One preparation that has attracted considerable attention, particularly in England, where it was first put forth, is a product left after extracting the fat and wax from the tubercle bacillus. This has been called diaplyte tuberculin, by the investigator, G. Dreyer, who first prepared it. It is Dreyer's theory that injection of this substance will stimulate resistance readily, because, robbed of its difficulty digestible fat, it is more easily absorbed by the tissues than the untreated bacillus. To prove that his preparation does stimulate resistance, Dreyer has published some results obtained through its use in rabbits. He did not prove, however, that there was heightened resistance to tuberculosis. A few guinea-pig observations published were not conclusive because so few animals were used in the experiment.

The remedy has had an extended trial on tuberculous patients, however, and some favorable results have been reported. From other sources reports have come indicating the substance to be of no more value than other preparations of tuberculin. Its most ardent defender claims no magical results from its use. Improvement is slow, as under other forms of tuberculosis treatment, and much doubtless depends on the skill of the physician administering it, as in other types of tuberculin treatment.

Hans Much's Immunizing Product

Another investigator, with quite different ideas, has put forth an entirely different sort of immunizing product. Dreyer believed that tubercle bacilli, on injection, stimulated resistance better after the removal of their fatty substances than before, whereas Hans Much of Germany and his followers believe that the fatty substances are the most important part of the bacillus for immunizing purposes and should certainly be saved. Only slight value is conceded to the fat-free substance of the tubercle bacillus.

Like Dreyer and dozens of others who have presented evidence to prove the value of certain preparations from the tubercle bacillus, Much has published a large number of records in favor of his products. Treatment is backed up with an elaborate framework of theory, in accordance with Much's ideas on immunity.

The chief objection is that the whole theory is on a questionable basis. Certainly a majority of scientists who have made immunity their chief study do not entirely agree with Much's theories. All are willing to admit that the fatty substances to which Much attaches such importance play a rôle in immunity, but few are willing to believe them of chief prominence. Nor are the results on patients so outstanding as to prove beyond question that this is the method of treatment for which we are all looking. At best, the method is simply one form of treatment, not a quick or infallible cure.

An elaborate method of treatment has recently been proposed in Switzerland by the bacteriologist Spahlinger. The substances used in the treatment appear to be numerous and complex. All the details of their preparation are not made public. More than twenty separate preparations seem to be used in the treatment, which aims not only to stimulate immunity, but also to neutralize poisons already present in the system.

Scientists of wide experience have questioned the scientific basis of several of the procedures, as far as these are known from the meager although enthusiastic reports of Spahlinger's adherents. As a matter of fact, the whole method has been cloaked with so much secrecy

that the majority of scientific men are quite skeptical of its value.

Scientific achievements are usually so announced that criticism and repetition of the work are welcomed. Spahlinger has not put forth his "cure" in this way. He has, however, secured influential support in England, and accounts of results with patients may be expected any time.

The foregoing methods are samples of attempts that are being made to increase the resistance of the patient by means other than simply building up his strength through good hygiene. A quite different method is that in which the effort is made to kill the germ of the disease within the body.

Gold Cures Have Long Been Tried

The most recent treatment of this character, and one to which enormous publicity has been given, is a method recommended by Møllgaard of Denmark. This has been called the gold cure, but would be better termed "a" gold cure, as half a dozen other gold cures have been proposed in the past.

The basis for the treatment is the observation, made thirty-five years ago by Robert Koch, that compounds of gold have a strong retarding influence on the growth of the germ of tuberculosis. As minute an amount of gold in solution as one part in two million was found to have a noticeable effect. The action was so striking that Koch himself attempted to cure tuberculosis with gold salts, but after several unsuccessful trials he gave this up. After Koch, several others took up the problem, and a number of these have claimed some success with gold preparations. None of these gold products ever secured anything approaching the publicity that has attended the introduction of the compound proposed by Møllgaard.

It is still too early to say much about the value of this compound, which is called sanocrysine and which is known in chemical terminology as sodium aurothiosulphate. Enthusiastic reports of its value emanate from Denmark, but objections have not been wanting from other sources. The Danish scientists claim that small amounts of the drug, easily tolerated by the human body, actually kill the germ.

Two American investigators, Sweany and Wasick, on the other hand, reported at a recent convention of the National Tuberculosis Association that the compound in such concentrations as the human body can safely stand does not kill the germ. These investigators feel that any beneficial results secured by the Danish scientists in the treatment of tuberculosis must be due to some effect other than an actual poisoning of the germ. In the discussion that followed the presentation of their paper, it was brought out that gold compounds are highly poisonous to animal tissues, particularly the kidneys, and therefore the use of such compounds is attended with considerable danger.

Hence the treatment cannot be said to be an unqualified success. Extensive official investigation of the value of the substance is being made in several countries. In view of the strongly poisonous nature of the drug, it is decidedly better to await the official reports than to indulge in indiscriminate use of the compound at present.

Besides gold compounds, certain mercury and copper preparations have been recommended in the treatment of tuberculosis. At the meeting of the National Tuberculosis Association mentioned above, the value of a substance known as mercurochrome, consisting of mercury in combination with a dye, was discussed by H. J. Corper and his colleagues.

The report was based on experiments with mercurochrome in rabbit tuberculosis and was unfavorable. The chief objections were the poisonous action of the substance on tissue, and the poor germicidal power on the tubercle bacillus. The discussion brought out a difference of opinion, some holding with Corper that the substance was not of definite value in tuberculosis, others claiming that it was useful as a local measure.

Copper Compounds Given Trial

Copper compounds have been recommended by a number of investigators. The Countess von Linden, in Germany, and Koga and Sugai, in Japan, have made the strongest claims. But more than ten years' trial of the compounds recommended has failed to demonstrate any extraordinary action in tuberculosis. Von Linden began her reports in 1913, and her collaborators have published many papers since then. If copper possessed the value originally claimed for it, we may be sure that by this time the usage of the copper compounds recommended would be rapidly increasing, instead of decreasing, as it actually appears to be.

The original claims of Japanese workers concerning the value of cyanocuprol, the copper preparation used by Koga and Sugai, have been much modified by later investigation. Agreement is general at present that this compound does not destroy the germ, but it may be stimulating to the tissues in which the germs of the disease are lodged, and affect them in much the same manner as tuberculin. Lydia DeWitt and Corper in this country have carefully studied the effects of copper on tuberculosis in rabbits and have found it to have no appreciable effect on the course of the disease.

These brief accounts are perhaps sufficient to give some idea of the lines of investigation that have seemed practical. No attempt has been

made to discuss all the remedies proposed in the last few years, and space has not permitted an exhaustive consideration of those that have been mentioned.

Enough has been said to indicate that there is no cure yet on record that is an unquestioned improvement on the admittedly slow and uncertain hygienic measures in use at present, supplemented, as these are, by a few time honored special remedies.

It must not be supposed that all investigation of tuberculosis is directly aimed at the elaboration of a cure. It has long been felt that what we need first is a better understanding of the nature of the disease. The greater part of the investigation carried on at present is conducted with this aim. The National Tuberculosis Association through its research committee has developed a policy of research that recognizes this view.

There is reason for believing that knowledge gained in this direction will at least lead to a definite improvement in existing methods of treatment of tuberculosis, if not in the development of an actual, rapid cure.

After all, we must remember that there is much to the cure of tuberculosis besides the destruction of the germ causing it. Much tissue damage attends the disease, and the repair of this, a lengthy process at the best, is as much an element in recovery from tuberculosis as the annihilation of the tubercle bacillus.

May Day National Rally Day for Child Health

MAY Day has always been a festival of flowers. For centuries on the first day of May people have celebrated spring and the coming of summer by exchanging May baskets of spring flowers and by dancing and singing around May poles. Young girls chosen for their charm and beauty were made May queens of the different communities.

That this coming May Day will be celebrated as a national festival of childhood, is the hope of the American Child Health Association. The association, with the cooperation of other health agencies, wants to make it possible that on this and future May Days every boy and girl of every community may be chosen king and queen because each one has the charm and beauty of perfect health.

May Day of 1926 will be the third of these celebrations. It is interesting to note what has been done on the previous two festivals.

Parades, pageants and May pole programs were instituted. In one city the caps of the milk bottles on May 1 bore the message, "Good morning, this is child health day." In another state for a whole month all the mail from the board of health carried the slogan: "The first of May is every child's day."

Many schools made the first of May a day of festivity, with entertainments of dances and songs given before the parents. The protection of the children's lives and health was emphasized in the hope of rousing the parents and communities to greater efforts along these lines.

Women's clubs throughout the country were also active in promoting the cause of child health by the observance of this sort of children's festival on May Day.

May day committees in one state formed a permanent nucleus for the protection and promotion of the health of children. Other communities in the same state instituted baby hunts for 1925-26, to discover the needs of their babies. In some parts of the country department stores held baby weeks during which babies were examined by physicians and nurses and advice was given the mothers. In other places drives were started to round up the preschool children and see that they were fit before entering school.

In one state committees were formed to present to the people of their communities an exhibit of the services available in the communities for the health of the children. This was to be followed by a careful study of the health needs of children in each group.

In some places health and happiness leagues were inaugurated. In others, child health clubs were started, with the idea of making every day a child health day. Membership cards were issued to any child whose parents promised to have him examined periodically and to use every effort to correct defects and bring about better health along constructive lines.

These clubs, instituted in the schools on May Day, increased the cooperation of the children and parents with the schools and health authorities, and carried the May Day idea of child health through the entire year.

In these ways the first of May became a national rally day for child health. It is hoped that May Day, 1926, will be an even bigger and greater rally day for this new and important kind of conservation.

Chinese and Western Doctors

Modern Medical Science Is Replacing Antiquated Methods

CHI-CHEN WANG

"THE POOR child has the measles," said the fond grandmother, after feeling the forehead of the sick child and examining his chest. "We shall call in Mr. Chang Te-San, the infant specialist."

"No," the father said, "I think we ought to send for a Western doctor. He is more scientific and more reliable than Chinese doctors."

"But you never can tell what the foreign doctors will do, son," protested the grandmother. "He might take the child away from us to the hospital and put an ice cap on him. That surely will kill him."

But the young father was determined that a Western doctor should be sent for. He had just had a course in physiology in college and had learned to respect and trust the Western doctor.

"The Western doctor knows his business. He has studied physiology and anatomy, while the Chinese doctor learns his art from books. He is more scientific. Even if he should take the child away from us and put an ice cap on his head, I would let him do it. I would rather have my son die in the hands of a scientific doctor than in the hands of an ignorant quack."

So after a family council consisting of father, mother and grandmother, it was decided that a Western doctor should be sent for. The mother did not commit herself; she trusted her experienced mother-in-law, but she had some reverence for her husband's training in college.

The doctor did not take the child away. He gave orders regarding quarantine and left some medicine with directions. The child recovered from the measles in due time.

Distrust of Western Doctors

The above incident is typical of the present medical situation in China. The older people are accustomed to the old practice of herb medicine and distrust the Western doctors. They abhor the idea of using ice bags to relieve fever; they fear operations. They would not enter a hospital except as a last resort. Chinese doctors have served them well in the past and they are loath to try the unfamiliar art of Western doctors.

The younger generation, however, is depending more and more on the Western doctors, and with the rise of the younger generation the Western doctors are gradually gaining more prestige. Today, in the larger cities, the hospitals with their trained doctors are looked on as sources of aid in time of illness. The influence of modern science is more pronounced in the cities than in smaller towns and rural districts. The older generation is gradually learning to tolerate the ways of the modern doctors; the younger Chinese people go to the Chinese doctors only when they have no access to a scientifically trained practitioner.

The Origin of Chinese Medicine

Chinese medicine is founded on experience rather than physiology. According to tradition, the great mythological emperor, Shen Nung (2800 B.C.), or the Divine Farmer, had a transparent trunk and transparent internal organs These enabled him to taste all kinds of herbs and to watch the effects of the herbs on the various parts of his body. A book on herbs, which is still read by the old Chinese, is attributed to him.

Since the time of Shen Nung new uses for drugs have been discovered and in the sixteenth century the Pen Tsao Kang Mu was published by imperial decree. This colossal work of fifty-two medical books lists thousands of substances, comprising the vegetable, animal and mineral kingdoms, and describes the curative properties of each substance. The book has been revised and enlarged, until now it is one of the monumental works of Chinese literature.

There are numerous books on prescriptions, which, besides listing successful remedies, treat the effects that can be secured through combining various herbs. The most famous of these books is the Pu Chi Fang, or universal prescriptions, which consists of 160 books and contains 21,000 different prescriptions.

Every prospective Chinese doctor studies these two books until he knows the more important herbs and prescriptions by heart. After he has learned the secrets of the medical books, he serves an internship by immediately beginning to practice, for until recently no license was required for the practice of medicine in China.

So by blundering and practicing, the Chinese doctor learns his profession. It is surprising how well he does under the circumstances. It

is no doubt due to the fact that through centuries of accumulated experience, the Chinese doctors have discovered a reliable system of diagnosis and standard prescriptions. Each Chinese doctor has his pet theories, but on the whole he follows the accumulated experience of his predecessors and varies only in the minor details.

Diagnosis by Feeling the Pulse

When called out to see a patient, a Chinese doctor first feels the forehead of the patient to determine the degree of the fever or the absence of it; he does not use a thermometer. Then he feels the pulse of both hands of the patient to determine where the ailment lies and what is its nature. The books on pulsations seem to have incorporated into their volumes the characteristic movements of the heart that accompany different diseases. Determining the pulse of the patient takes from ten to thirty minutes, according to the nature and complexity of the ailment.

Pen, ink and paper are then brought and the doctor writes his prescription; the prescription often contains more than a dozen herbs. The amount of each herb is specified and the way the remedy should be taken is also given. The prescription is taken to a Chinese drug store, where thousands of medical substances are kept in drawers that line the walls of the building. Each herb is wrapped in a separate package and labeled. The herbs are carried home, emptied into an earthen pot with two cups of water and boiled over a slow fire until the water is boiled down to about one cup.

The prescription is used for two or three days; at the end of that time the doctor is sent for and makes alterations in the dosage according to the condition of the patient.

The system of diagnosis by observing the pulse has some scientific background. There are four cardinal principles of pulsation which Chinese doctors consider axiomatic: a light pulse indicates external disturbances or causes; a deep pulse indicates internal causes or disturbances; a quick pulse indicates fever or heat, and a slow pulse indicates colds or chills.

The Chinese doctor, however, is not satisfied with these general distinction. Each wrist is supposed to represent a different part of the body and each wrist is again divided into three parts, roughly corresponding to the first three fingers when they are placed on the wrist to feel the pulse. These three points are known respectively as the *tsun, kuan and chih.*

L. C. Arlington, writing on "The Mystic Art of Feeling Pulse," indicates the nature of the diagnosis: "If the left *tsun* is light and rapid, there is disturbance in the region of the heart, such as caused by external heat. If the right *tsun* is superficial and quick, it indicates that the disease is caused by external heat in the lungs and chest. If the *kuan* on the left wrist is deep and quick there is internal heat in the liver and gall; but if the *kuan* on the right side is deep and quick there is internal heat in the spleen and stomach. If the left *chih* is superficial and slow it indicates external cold in the kidneys and bladder. If the right *chih* is superficial and slow it indicates external chill in the kidneys and colon."

Even these fine distinctions are not enough for the Chinese doctors; they even presume to be able to predict death by feeling the pulse.

L. C. Arlington writes regarding this: "If the left *kuan* is sharp as a knife, it indicates serious complications in the liver and death may be expected within eight days. If all the six pulses or the right *kuan* in particular resembles the noise of a bird pecking, the noise of running waters, or is like the sound of water dripping from a roof, or like the noise of the upsetting of a cup containing water, it indicates serious congestion in the bowels and death may be expected within seven days."

Chinese Pharmaceutics

Chinese doctors divide all herbs roughly into the cool and the hot varieties. Certain diseases are classified as hot and others as cool or cold; fevers are generally combated with cooling herbs. However, Chinese doctors do not like sudden changes. They fear that the cooling medicine, if used in excess or too suddenly, would inhibit the transpiration of the fever. They start in with some mild herbs, neutral in nature, and gradually increase the amount of cool herbs. This gradual use of cool herbs is followed in case of the more serious diseases. In simpler fevers, cooling medicines are used without the preparatory process. Licorice is extensively used by Chinese doctors; it is believed to be a mild medicine and to be neutral in character. It is used in almost every prescription.

Chinese doctors may not be scientific, but through centuries of experience they have discovered a number of remedies for various ills which Western doctors now use. Kaolin, a whitish clay found in many parts of China, has been used for centuries in Chinese medical practice and has been one of the staple medical ingredients. It is a favorite with Chinese doctors in prescribing for manifold fevers and intestinal ailments prevalent in the summer months. One of these summer epidemics is

cholera, which breaks out regularly in China during the summer, owing to the lack of sanitary water and sewage systems. Long before Western doctors discovered kaolin as a curative for cholera, Chinese doctors had been using it.

Huashih (literally meaning slippery stone)—the Chinese name for kaolin—is kept by Chinese drug stores in its natural state, in lumps of varying sizes; kaolin is kept by Western pharmacies in a purified powder form. Everything from herbs to minerals comes in its natural state in China. It is believed by the Chinese doctors that the slow boiling of the different herbs brings out their curative properties.

International

Each herb is kept in a separate drawer. There are hundreds of these compartments for herbs lining the walls of a Chinese drug store in San Francisco.

Most of the ingredients Chinese doctors use have been founded on experience, but a number of the things used are based on imagination and superstition. An ancient comb, for instance, is solemnly described in the medical books as a remedy for hair that has been swallowed. According to directions, the ancient comb is to be burned and the ashes used with herbs that the doctor may prescribe. The comb, as an instrument for straightening out unruly hair, is supposed to be a remedy for hair in the stomach.

Nearly everything under the sun is described in the Chinese medical books. The budding horns of a wild buck, the bile of snakes, the exuvia of the cicada, species of mountain scorpions, the dirt in the middle of the road, the first frost gathered from the leaves of plants, old combs, ancient coins—in fact there is hardly anything that one can mention that has not been used by Chinese doctors for some kind of illness. Fantastic things are, of course, only rarely used; the greater number of odd substances are used for chronic ailments. After standard remedies have failed to effect a cure, the patient will try anything that the ingenious doctor can devise. It is in this way that fantastic remedies came to find a place in the Chinese medical books.

Progress of Modern Medicine

But all these things are bound to change and to give place to the more scientific practice of the West. The fond grandmother who wanted to call a Chinese doctor to attend the child with measles was, as are many other grandmothers, fighting a losing battle. As the frontiers of modern education and science push forward, ignorance, superstitions, tradition and prejudice are receding. With the cities as centers of scientific enlightenment, the frontiers set up by them will soon merge until there will be little room for old-fashioned and unscientific medical practices.

The term "Western doctor" does not apply only to European and American doctors; it includes Chinese doctors who have studied in modern medical schools. Modern methods of sanitation and preventive medicine are being taught to the masses; this is paving the way for a general acceptance of Western doctors.

In reviewing the medical progress in China since the founding of the republic in 1911, Dr. Wu Lien-Teh, noted for his work in suppressing the pneumonic plague in Manchuria, writes: "In spite of the disturbed state of the country since the establishment of the republic in 1911, the progress of medical and sanitary science has been marked and steady. This has shown itself in two ways: (1) the readiness with which both the central government and the provincial authorities have established and supported hospitals and institutions of a sanitary nature; and (2) the increased interest shown by the general public in Western medicine, home cleanliness and matters bearing a hygienic value."

Chinese to Make Contributions

It is doubtful, however, if old-fashioned Chinese doctors will vanish in this generation. Experienced Chinese doctors are expert in the treatment of nonsurgical diseases; even Chinese Western doctors will admit this. For a generation or two Chinese doctors will probably practice side by side with Western doctors, and when they finally pass on, some of their practices and methods will probably be incorporated into the new Chinese medical practice.

"I believe that a scientific study of Chinese medical practice will result in the discovery of a scientific basis for the Chinese remedies that have proved efficacious and important contributions to modern medical science," said a young American-trained Chinese doctor.

Waging War on Ants and Cockroaches

W. B. HERMS

THE better acquainted one is with the life of insects, the better able one will be to control them if it becomes necessary to do so. When the home is invaded, when persons are attacked and when foods on the table and in the pantry are sought out by the invaders, there is not only annoyance but alarm. One wonders where they come from, and what else besides good wholesome human food they tread on. The result of such an investigation may reveal a grave situation. These selfsame invaders may tread and feed on dangerous human excreta or sputum; then, without sanitary precautions, they may proceed to scurry into the pantry and on the table. Ants and cockroaches at once come to mind as gross offenders against the laws of public health.

I. Ants

There are approximately 3,500 species of ants. No other social insect, and it is this feature of ant life that impresses us most forcibly, has so successfully reached a dominating position of world-wide distribution. Ants display a marked adaptability in their nesting habits, making it easy for them to change homes under stress of environment. Frequently the lines of an ant colony may be seen traveling across country, each ant bearing its burden of an egg, larva or pupa; in short, the entire household is being moved to a more favorable abode.

The fact that ants are not particularly restricted in diet makes it easy for them to gain a foothold and to maintain a livelihood, even under apparently meager food conditions. Their fondness for the sugary secretions and excretions of other insects, such as mealy bugs and plant lice, presents a problem of some importance in ways other than domestic or sanitary.

With its adaptibility in food and nesting habits, the ant combines a native energy and ever-busy disposition, which give it a decided advantage over most other insects.

Peculiarities of Ants

Ants exhibit interesting differences in size and function. The queens are usually much larger than the other members of the colony and, like the males, which are also large in size, are usually provided with wings during a short period of their lives, when the marriage flight takes place. The workers of the colony are the almost numberless smaller individuals that one sees swarming over the face of the earth on foraging expeditions. Certain sturdy Amazonian forms, provided with huge jaws set in a correspondingly large head, generally remain near or in the nest as defenders and for other purposes for which strong jaws are needed.

The jaws of ants are useful instruments. They are used for digging in the ground or even in wood, for carrying burdens, for fighting, and to a certain extent for crushing solid food to extract the juice. Solid food is not suited to the mouth structure of ants, unless it is in extremely fine particles. The larvae, on the other hand, which are grublike, may be fed more or less solid food; this is brought to them by their nurses. The queens are also fed in a similar manner. This is a reason why a poison that acts more slowly, allowing the workers to carry it to the queens and larvae, is likely to give better results in the long run, although its immediate action is not so spectacular.

Of the two dozen or more species of ants more or less regularly infesting houses on this continent, practically all are of tropical origin. Among the several species of tiny ants invading the pantry is Pharaoh's ant, or the little red ant. Then there is the very large, almost black native carpenter ant nearly one-half inch in length; it may invade the house and almost literally run away with a pan of doughnuts. Between these two extremes in size are the numerous common house invaders—just plain ants.

Means of Exterminating Ants

One species of these moderate sized ants is the Argentine ant, a comparatively recent introduction from South America into Louisiana, thence to California, and spreading where climatic conditions are fairly tolerant. This species of ant is without question a serious foe not only to householders, but also to fruit growers, since it is a strong ally of the dangerous mealy bug of the orchard and vine.

The presence of foraging ants in the house is the sign for action. They have been guided by their keen sense of smell to food, and before one knows it scouts have returned to the nest and a line has been established. Scraps of meat, crumbs of cake, bread, sugar and the like left on the shelves, in the sink or in other open places will certainly soon attract ants.

Cleanliness is essential to ant control; these busy creatures find food particles that only a

vacuum cleaner or hot soapy water with elbow action will remove. The dusting of ant powders in crevices around the pantry and across the trails will generally act at least as a repellent. The most effective ant powders contain sodium fluoride as the principal ingredient.

House invading ants can usually be traced to their colonies outdoors in the lawn, dooryard or under the house. Frequently much good can be accomplished simply by drenching the nest with boiling water or kerosene. The distribution of ant poison in cans and other receptacles in the yard and around the foundation of the house must be done with some caution, because of the danger to young children and pets.

Sodium arsenite is the poisonous element usually used in ant syrups. The Department of Agriculture recommends the following formula:

Granulated sugar	1 pound
Water	1 pint
Sodium arsenite	125 grains
Concentrated lye	1 ounce

The mixture should be boiled and strained, and on cooling used with sponges in perforated cans. The addition of a small amount of honey is said to add to this mixture's attractiveness to ants. Naturally the greatest precautions should be taken in preparing this sirup and in safeguarding it afterward, to prevent its being the cause of poisoning to human beings or domestic animals.

A related formula experimentally worked out for the Argentine ant is given in a Department of Agriculture special bulletin on this insect:

Granulated sugar	12 pounds
Water	11 pints
Tartaric acid (crystallized)	¼ ounce
Sodium benzoate	½ ounce

These ingredients should be boiled together slowly for thirty minutes and the mixture allowed to cool. Three-fourths ounce of sodium arsenite should then be slowly dissolved in one-half pint of hot water. This should be allowed to cool and added to the syrup, stirring it thoroughly. By adding 2 pounds of pure honey to the syrup, the mixture is ready for use.

II. Cockroaches

Cockroaches rank among the larger insect inhabitants of the earth, some of them reaching a body length of nearly 2 inches, exclusive of their long slender feelers. Their bodies are greatly flattened and are a smooth, shining, chestnut brown to black. Although most roaches have fairly well developed wings, they are typically running insects, scurrying hither and thither under cover of darkness, for they are night prowlers, hiding away in dark crevices during the day. Thus old, ill-kept, dark houses, with warm kitchens and pantries in winter, are most commonly invaded by the cockroach.

This insect, of which there are four or five house-inhabiting species in this country, especially the small German cockroach or croton bug, is particularly disgusting for two reasons: (1) because of the indescribably offensive roachy odor that it lays down on everything with which it comes in contact, and (2) because of its indiscriminate and dangerous feeding habits. Roaches have biting mouth parts like those of grasshoppers, and consequently actually nibble their food bit by bit. They are particularly fond of sweet and starchy matter. Their fondness for starchy substances leads them to do considerable damage at times in loosening hat bands, shoe linings and book bindings.

The female cockroach carries around with her a dark brown, pod-like structure, which protrudes conspicuously from the tip of her abdomen. This is the egg case. When the eggs are about ready to hatch, the egg case is deposited in some warm, dark crevice, and soon the little roaches emerge. They are at first wingless; but gradually, after molting their skins from five to seven times, they reach the winged state and mature size.

Sunlight Is Roach's Enemy

To control the cockroach, one must bear in mind that daylight is its greatest enemy. One should do away with old fashioned sink cupboards. Open clean spaces in which sunlight or at least broad daylight may freely enter will never harbor cockroaches.

One of the most effective simple means of ridding the premises of roaches is dusting with commercial sodium fluoride, either pure or diluted one-half with some inert substance, such as powdered gypsum or flour. With the use of some dust gun or blower, the sodium fluoride can be thoroughly dusted over the shelves, tables, floors and the runways and hiding places.

The immediate effect is to cause these insects to come out of their retreats and to rush about more or less blindly, showing evidence of discomfort. This is followed in the course of a few hours by death. The dead or paralyzed roaches can be swept up and burned, and complete extermination is effected within twenty-four hours. It is not definitely known whether the sodium fluoride acts as a contact insecticide through the breathing pores or as a stomach poison. Probably it acts in both ways.

Powdered borax also enters into the composition of many of the so-called roach powders. This substance may be used either pure, as a poison or repellent, or mixed with some other substance to render it attractive to the insects. Several correspondents have reported great success from the use of a mixture consisting of 1 part of powdered borax to 3 parts of finely pulverized chocolate, this mixture to be freely sprinkled about the infested premises.

Government Guides to Health

JAMES A. TOBEY

THE world's largest printing establishment is located in Washington, D. C. It is a remarkable concern in many ways and for many reasons. Although not a medical publishing house, it has for distribution more than a thousand bulletins relating to all phases of personal and community health.

Many of these pamphlets are given away, and any person can get them merely for the asking. The subject matter is authoritative, and the advice given can be followed without hesitation, for every one of these pamphlets has been produced by a scientist thoroughly familiar with his topic. Otherwise, this publishing concern would not have invited or permitted the author to write for it, because its customers, who number over 100,000,000, must be given only the best. These customers happen to be all the people of the United States.

This printing house is maintained by a well known organization called the United States government. Every citizen is a stockholder in the concern, and each is entitled to his share of Uncle Sam's literary products, either free, or at a nominal cost, depending on the availability of the supply. The Government Printing Office at Washington can print only such quantities of various bulletins as an appropriation permits.

May Write for Publication Lists

A complete list of the publications relating to hygiene and sanitation may be obtained without charge from the Superintendent of Documents, Washington, D. C. This is Price List 51 and was issued in July, 1924. There is a separate list, No. 11, on Foods and Cooking, and another, No. 71, on the Children's Bureau and other publications relating to children.

These lists contain prices for every document that is available. While these sums are far less than the value or cost of the pamphlets, they may also usually be obtained without any charge direct from the particular federal department or bureau under whose auspices they have been prepared. The bureau will send single copies free to individuals and up to fifty copies to societies, as long as its supply lasts. When the bureau has no more copies, they must be purchased at the nominal rate from the Superintendent of Documents, who will sell any number, so long as payment is made in advance, and provided that the purchaser gets them for his own use or to give away, and not to sell or distribute at a profit.

Members of Congress are allotted a fixed quota of government publications, and they may send these free to their constituents. A congressman is usually only too glad to procure for the man back home any pamphlet he may desire.

Since there have been more than a thousand health bulletins produced by thirty government bureaus, a guide to the sources of some of the popular material that is considered by physicians and sanitarians to be of special value to those interested in personal hygiene or public health will be presented in this article.

The principal health agency of our national government is the Public Health Service, which is a bureau in the Treasury Department. This Service, in addition to its quarantine duties, its medical inspection of immigrants, its medical service to certain federal employees, and its cooperation with state health authorities, conducts many important investigations relating to diseases and health; as a result, and also independently of these studies, it has issued many pamphlets and bulletins. A complete list of them (in Miscellaneous Publication No. 12) may be obtained without charge from the surgeon general of the Public Health Service, Washington, D. C.

Besides its complete list, the Public Health Service has a reprint (No. 803) giving the titles of some publications suitable for general distribution. The Public Health Service is also an advisory member of the National Health Council, which, from its headquarters in New York, has issued the excellent National Health Series, twenty moderately priced books on all phases of human health.

Keep Well Series Is Valuable

Of value to the nontechnical reader will be found the Keep Well Series of the Public Health Service, comprising thirteen concise leaflets on personal hygiene. Other aspects of hygiene are dealt with in reprints, supplements and bulletins. The prevention and control of such diseases as typhoid, malaria, hookworm, common colds, tuberculosis, smallpox, the diseases of school ages, the venereal diseases and many others are outlined in these useful publications. Of particular value is "Prevention of Disease and Care of the Sick," a 318 page book; this can be purchased only from the Superintendent of

Documents. Other subjects covered by Public Health Service pamphlets are water supply, sewage and waste disposal, production of pure milk, rural sanitation, mental hygiene, health in the workshop, and the care of babies and children.

The health of mothers and infants and of children up to school age is treated in a popular way in a number of bulletins issued by the Children's Bureau of the Department of Labor. Three or four of these deserve special mention. They are:

Prenatal Care, by Mrs. Max West (Bureau Publication No. 4).

Infant Care (revised), Bureau Publication No. 8).

Child Care—The Preschool Age, by Mrs. Max West (Bureau Publication No. 30).

Child Management, by D. A. Thom, M.D. (Bureau Publication No. 143).

The tremendous popularity of these pamphlets is shown by the fact that in ten years or so, over 2,500,000 copies of the one on infant care have been distributed. Like the Public Health Service, the Children's Bureau has a set of popular leaflets, known as the Dodgers on Child Welfare. Among the 150 or more bulletins that the bureau has issued are circulars and pamphlets on feeding, milk, nursing, play and recreation, child labor and many other aspects of child welfare. A complete list of these publications may be secured from the Chief, U. S. Children's Bureau, Washington.

Much Material on School Health

School children's health is the concern of the division of school hygiene of the U. S. Bureau of Education, which is in the Department of the Interior. This bureau also has available a number of attractive and useful pamphlets. Chief among them are the Health Education Series, which comprises sixteen pamphlets on such pertinent topics as diet for the school child, the teaching of health, play, school lunches, milk, sleep and suggestions to teachers and others interested in a health program as a part of education. This bureau likewise has valuable weight and height charts for classroom and other use, besides a number of school health studies of a more technical nature. A separate list of all this material is obtainable from the federal commissioner of education at Washington.

Food is important in the maintenance of good health, and a number of the federal bureaus have made investigations of human nutrition. The Bureau of Home Economics of the Department of Agriculture receives a special appropriation for such studies and has issued a number of popular pamphlets on the subject. Among them may be mentioned:

Food for Young Children (Farmers' Bulletin No. 717).

Good Proportions in the Diet (Farmers' Bulletin No. 1313).

Food Values and Body Needs Shown Graphically (Farmers' Bulletin No. 1383).

Care of Food in the Home (Farmers' Bulletin No. 1374).

This bureau has other bulletins on milk, special foods and their uses, and on home economics subjects, and has issued a selected list of government publications on foods and nutrition, which was revised in January, 1925. The Department of Agriculture publishes other pamphlets on sanitary subjects, notably one on Sewage and Sewerage of Farm Homes (Farmers' Bulletin No. 1227) and others on milk, insects and animal diseases, many of which may have an effect on human health. A complete list (Price List 16) of the Farmers' Bulletins may be obtained from the Superintendent of Documents.

Workers' Health Has Been Studied

The health of the worker is covered by the pamphlets of other bureaus, including the Bureau of Mines of the Department of the Interior, the Bureau of Labor Statistics and the Women's Bureau of the Department of Labor, and also by a number of reprints of the Public Health Service. Some of these are technical, but many are of a popular nature.

National vital statistics are issued by the Bureau of the Census of the Department of Commerce, which has voluminous reports, life tables and other data, chiefly of interest to the scientist.

During recent years the Government Printing Office has distributed over 56,000,000 pamphlets annually, at a cost of about $11,000,000 a year. Of the pamphlets distributed about 6,500,000 were sold; the remainder were given away. Of the total number sold and given away, it is estimated that at least 5,000,000 have dealt with public health.

It is to be hoped that some day there may be a central source of public health material in the federal government, instead of the present system whereby the seeker for health information must apply to a number of different federal agencies in order to get health pamphlets on different subjects. The more effective correlation of federal health agencies has been repeatedly suggested and undoubtedly will eventually be brought about.

For the present, citizens should make full use of the available material on health, even if they have to apply to several different bureaus. It should be borne in mind, of course, that none of these bulletins are designed as a substitute for necessary medical attention, but that they all are guides to hygiene and sanitation, sciences the practical application of which inevitably results in enhancing the health, happiness and efficiency of all persons.

Removing Birthmarks

IF YOU have a birthmark it has probably been explained to you that your mother met with some dreadful experience a short time before your birth. You probably were not informed that the cause of your being so marked was discovered only after the birthmark had been found.

The belief is almost universal that maternal impression, such as a scare, will leave an imprint on the unborn child and that this imprint will have a pronounced resemblance to the nature of the experience that made the impression.

Such a belief cannot be explained on any scientific basis. If maternal impression of this nature leaves a likening imprint, how does it do so? You will say that it is through the nervous system, but there are no nerve connections between mother and child. Then you will say that it was because of influence on internal secretions, but such an influence cannot single out a single area such as the usual birthmark.

Birthmarks are apparently caused by some errors of development of which there would seem to be many possibilities, such as a few or many cells being caught up or arrested in areas where they should not be. Unquestionably pressure in prenatal life may affect the proper development of the child.

However, a person is not so much interested in how he got the birthmark as he is in how to get rid of it.

A vascular birthmark is an anomaly of the blood vessel arrangement of some area of the body. This type of birthmark may be a soft, compressible mass located anywhere on the body and varying in size from a pea to an orange or larger. It is of a bluish shade. Others of equal size are bright red. There is also the mixed type, which combines the bright red of the arteries and the blue of the veins. A common type, which is usually difficult to remove, is the so-called port wine mark. This is composed of capillaries and small arteries and is bright red or bluish red. It is in the even surface of the skin and is often located about the face.

Splendid results are often had in the removal of birthmarks. However, none except those thoroughly acquainted with the means to be employed and possessing a knowledge of the anatomy of the parts involved should ever be allowed to undertake the removal.

Physicians treat these birthmarks with simple treatment, such as firm pressure or painting with flexible collodion at frequent intervals. In other cases injections of boiling water or of hypertonic salt or of sugar solutions may be the method of choice. Electrolysis is an efficient but more painful method. Some birthmarks require surgical excision dependent on the make-up of the mark and its location.

Carbon dioxide snow is a remedy. This gas is procurable in a large cylinder and is collected in the form of a solid snowy mass, which is molded into a pencil to fit the mark to be removed. Firm pressure of this pencil of snow is exerted on the birthmark for a few moments.

For the removal of port wine marks, physicians also use the water cooled quartz lamp and radium.

Some birthmarks disappear soon after birth, and others are removed by some slight injury. The cavernous birthmark should be treated early in life, whereas the port wine mark should be treated when the patient has reached an age at which he can cooperate with the physician. Unquestionably it is best to operate when there is yet physical development ahead, because nature is kind in overcoming defects in the growing child.

Distilled Water for Drinking Purposes

VICTOR C. VAUGHAN

IN SOME communities companies are now supplying families with distilled water for drinking purposes and are advertising its excellences. There can be no question about the safety of this kind of drinking water, provided it is prepared and handled under strictly sanitary precautions.

Distilled water may be contaminated by unclean bottles or soiled hands on the part of those engaged in marketing it. Moreover, it may be contaminated by cooling with infected ice. Its insipid taste, of which some complain, can be obviated by aeration, but this must be done under sanitary precautions; otherwise it is no longer bacteria-free when it reaches the consumer.

Distilled water has no germicidal action and disease-producing bacteria may not only live in it but may multiply at least for a short time. So far as the infectious diseases are concerned it has no advantage over boiled water, though it is superior in the elimination of organic matter and inorganic salts. In other words, boiled water is bacteriologically pure, while distilled water is pure both bacteriologically and chemically. In this particular, the verdict must be in favor of distilled water. Besides, there is a satisfaction in drinking a water that is both biologically and chemically pure.

Water Need Not Contain Calcium Salts

The claim that drinking water, especially that for children, should contain calcium salts is not justified by either observation or experiment. These essential constituents of bone, teeth and other tissues are contained in properly selected foods. This statement should not be taken as a condemnation of all mineral waters under all circumstances. That certain laxative waters have medicinal virtue cannot be denied, but this does not apply to ordinary conditions.

That goiter is due to mineral waters, especially in limestone districts, was long believed, but is not now held to be true. It has been quite conclusively shown that goiter is not due to the presence of any constituent of water, but to the absence of iodine. Therefore, the substitution of distilled water for the public supply will not prevent goiter and, as far as I know, no such claim has recently been made.

It is not likely that distilled water will ever be used for city supplies. The cost would be prohibitive. Quite naturally those who sell distilled waters magnify the dangers of waters containing small amounts of inorganic salts. I know of no city supply in this country in which such constituents constitute a menace to health.

The venders of distilled water, or at least some of them, condemn all spring waters. This is extreme and without justification in fact. Spring waters differ widely in both bacteriologic and inorganic constituents. Surface springs are liable to bacterial contamination and deeper ones may carry an excess of mineral salts.

The interstate sale of so-called lithia waters has been condemned under the pure food and drugs act; as I understand, for two very good reasons: (1) They do not contain lithia in unusual amount; and (2) they do not have the curative properties claimed for them by their venders. This does not mean that the sale of all spring waters has been interdicted, nor even that of these, under truthful advertisement.

The statement that all filters are useless or worse than useless in the purification of drinking water is untrue. The charcoal filter, once used so generally in the home, was shown thirty years or more ago to be a breeding place for bacteria, but, so far as I know, these have long since been discarded. If they are not discontinued, they certainly should be. Porcelain household filters are of value and are reliable when properly cared for, and sand filtration, either with or without chlorination, is now frequently employed in the purification of city supplies.

No Relation Between Gout and Mineral Waters

It is no longer believed that highly alkaline waters are beneficial in curing gout. On the other hand, the claim that gouty deposits are due to mineral waters is certainly not true. Sodium biurate, the chief constituent of gouty deposits, is not a mineral compound. Uric acid, from which the biurate is formed, is a normal constituent of the human body and is formed in excess when meat, especially certain glandular tissues generally known as sweetbreads, is consumed too largely.

Quite naturally those engaged in the development and sale of any kind of drinking water recommend that their patrons consume their product in large amount. Even pure water may be taken in harmful quantities. An excess weakens digestion, distends the blood vessels and overtaxes the organs of elimination. That one should drink four or more quarts of water, however pure, in addition to that taken in and with the food is, to say the least, questionable advice.

Sight Saving Classes for School Children

HELEN J. COFFIN

WHEN Tony was 5 years old he entered kindergarten in one of the best schools in the city—eager, enthusiastic, thrilled at this new adventure! Tony, his mother and his grandmother felt proud.

But when Tony was promoted to 1-B things did not seem to go well. He often felt tired and sleepy in school; many times the teacher asked him things that he could not understand—things about pictures on the wall, writing on the blackboard and stories on a big chart. It all seemed strange and puzzling; the other boys and girls pleased the teacher by answering her and talking about what they saw, but Tony couldn't see any fun in looking for answers when it made his eyes hurt and smart and did not make him any wiser.

Tony Thought He Was Dull

One day the other children received cards saying "1-B to 1-A," but Tony's said "1-B, not promoted." No one in his home knew just what that meant, but Tony had a feeling that it was a disgrace. His friends teased him and called him names, and he began to feel that he was not a bright boy. Bristling with righteous indignation, he began to assert himself with his playmates and won by pugilistic methods what he had lost in class prestige.

This worked pretty well, and Tony found that the next time the cards were passed out he was promoted. Then he had a new teacher, and the same disgrace befell him again—a card marked "2-B, not promoted." He hated school more and more; his head ached and he just could not read. He liked to hear stories, and the teacher called him lazy when he said he could not read one. He decided he must fight some more; and both in the classroom and outside of school he became the despair of the teacher; he was the leader in all the trouble he could possibly make. He was marked as a dull, stupid, mischievous boy, with a tendency to play truant.

One day the school nurse came with a test chart!

"Why, Tony can't see any but the biggest letters! Didn't you know that?"

"Oh my, no! I have always kept him in the back seat; he was so lazy and stupid," replied the teacher. "What an injustice I have been doing him! Why didn't Tony tell me that he couldn't see?"

Tony himself had not known what was wrong. His mother could not understand about glasses; it took several calls from the nurse and the visiting teacher to convince Tony's family that his eyes were imperfect, that his vision, even with glasses, was below normal, and that he would have to go to a sight saving class for the educational opportunity which the school had not given him.

Cleveland's Sight Saving Classes

Tony is one of 220 pupils in sight saving classes in Cleveland this year. When he went into his new class, he was given a book with large, clear type—type so large that it took about three books to hold all the stories that before had been in one. Tony had a teacher who knew how to prepare his lessons so that he could see. Sometimes the work was on the blackboard in large, clear, white letters; sometimes it was on a big chart directly in front of him, for he had a desk which he could move up to the chart. He learned to write large letters with a heavy crayon pencil and to listen to stories read aloud. He learned to use his hands to save his eyes. Best of all, Tony found that he could keep up with his grade; he recited all his oral lessons with the regular class, sat in the front seat and took pride in the correctness of his answers.

After Tony had been in the sight saving class about a year, his teacher was heard to remark, "I believe the sight saving class has done more for Tony than save his sight; it has saved the boy! He had such a bad record when he came here, and now he likes school and has made up his lost grades. He is the best boy in my class."

For the last fifteen years Cleveland has been providing classes for children who are blind and with partial sight. In 1909, eighteen pupils with defective vision were enrolled in a public school class; there they were taught to read braille. Since the establishment of the first class there has been a decrease in the number of blind children compared with the increase in the total school enrolment. Cleveland takes a tremendous amount of satisfaction in pointing to a record which shows that in 1924 there was only one school child in every 4,367 who was taught to read with his fingers, while in 1910 one child in every 3,708 school children had to learn to read with his fingers.

In 1915, a state law went into effect requiring all cases of inflammation of the eyes of the new-

born to be reported to the health department within six hours, and requiring the use of a prophylactic treatment (silver nitrate, 1 per cent). Blindness from babies' sore eyes, one of the largest single causes of blindness in school children, has been practically eliminated from the community since this law has been put into effect.

Another factor in the decrease in the number of pupils in classes for the blind has been the steady increase in the number of pupils attending sight saving classes. The first sight saving class was opened in Cleveland in 1913, with a nucleus of pupils from the braille classes who were unable to see enough to do the regular grade work, but who saw too much to be required to read braille. The enrolment in these classes has been gaining steadily in comparison with the entire school enrolment, and last year approximately one child in every 600 was found to require the special educational opportunities of the sight saving class.

Through effective medical inspection almost every child in Cleveland with seriously impaired vision is referred to the eye clinic and subsequently placed where he may receive equal educational opportunities regardless of a serious visual handicap. The earlier these little pupils enter the sight saving class the less time they waste in repeating work and the better chance the teacher has to instill sight saving habits.

The aim of a sight saving class is to provide for children who cannot see an education which is equivalent to that provided for all children with normal vision; at the same time, the sight saving class insures the conservation of sight. Children with defective vision are under educational experts whose duty it is to teach them, with due regard to their physical condition; they are also under the constant supervision of the school oculist. Under ordinary school methods progressive eye conditions, such as extreme nearsightedness, tend to become rapidly worse, and the assistance and advice of the ophthalmologists are constantly necessary.

In order that these pupils may not be coddled, they enter into competition with pupils with normal vision, and learn that the standards of achievement must be the same in spite of physical defect.

Another type of sight saving class is that for pupils with trachoma, an infectious eye disease that has always impelled exclusion from school. The separation of these pupils in a segregated classroom and the constant supervision and treatment of their eyes by the city health department and the school oculists have reduced the number of pupils in this group from a maximum of twenty in 1922 to eight at the present time. These pupils may use their eyes when they are not badly inflamed, but they are obliged to take a great deal of their work orally. Constant supervision is necessary to see that they do not strain their eyes. This disease, unchecked, is the cause of a number of cases of total blindness.

A visual handicap is an expensive handicap to surmount, because so large a part of our education is visual. To replace the usual means of education by methods that emphasize auditory and tactile processes of learning requires special appliances and extraordinary skill and tact on the part of the teachers.

These special educational opportunities are sometimes thought to have a high per capita cost, but what would be the cost to the community if these children received no education, or gained it at the expense of their sight?

Photo Courtesy Oregon Agricultural College

HAROLD: *"Who says a baby doesn't like spinach? It is one of the most delicious foods."*

HYGEIA

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Plain Facts about Health and Disease

HEALTH NEWS OF THE MONTH

Isolation of Crystalline Insulin

Professor John J. Abel of the Johns Hopkins University Medical School has announced the isolation of a crystalline form of insulin and has exhibited a small specimen of the product. Almost a quarter of a century ago, this same investigator isolated the active principle of the suprarenal glands, a substance which has a wide use in medicine, because it constricts blood vessels and raises blood pressure.

Insulin is prepared for general use today by extracting vast amounts of the pancreatic glands of hogs. The crystallization of the pure principle insulin or of a compound is a significant achievement. It means better standardization of the product and possible preparation of insulin by synthetic chemical means. Perhaps it may be a step toward the development of a product that can be given by mouth instead of by hypodermic injection, as is necessary today.

The work of Abel is another attack on the secrets of the glands of internal secretion, an interlocking directorate governing the functions of the human body.

Only a few years ago, E. C. Kendall of the Mayo Clinic isolated thyroxin, which is the active principle of the thyroid gland. It is only a few years since Doisy of the Washington University in St. Louis isolated what appears to be the active principle of the ovary, the female sex gland.

Last year J. B. Collip, who aided Banting in the purification of insulin, succeeded in preparing a specific substance from the parathyroid gland. This has a definite effect on the amount of calcium circulating in the blood, and thus controls various disease conditions that are dependent on the use of calcium by the human body. So powerful is the active substance that Collip has isolated that its injection into the body in the absence of a sufficient amount of calcium in the circulating blood will actually withdraw calcium from the tissues. Research workers in the Roosevelt Hospital, New York City, have just shown that the injection of parathyroid extract in the absence of sufficient calcium will cause both calcium and phosphorus to come into the blood from the bony tissues.

Tetra-Ethyl Lead Gasoline Report

A few years ago chemists in the motor industry developed a form of gasoline, giving it the trade name ethyl gasoline, which was intended to decrease the velocity of reaction of combustion in motor cylinders and thus eliminate "the knock" in gasoline motors. When this gasoline was made commercially available, it proved so popular that more than 300,000,000 gallons were sold in a short time.

Unfortunately the rapidity of development did not permit the taking of due precautions in factories in which the product was prepared. Deaths occurred and severe disease conditions resulted from lead poisoning in New Jersey and Ohio at plants where the gasoline was manufactured.

As a result, public health officials, led by Surgeon General Cumming of the U. S. Health Service, held conferences and a special committee was appointed to investigate the possibilities of dangers connected with the use of ethyl gasoline. This committee has just made a report, which refers not only to the manufacturing dangers, but also to the possible dangers from exhaust gas to persons in contact with motor cars in garages or in the street.

The committee reported that the drivers of cars using ethyl gasoline as a fuel showed no definite signs of lead absorption, although exposed to the gas for a period of two years. Employees of garages who handle and repair automobiles using ethyl gasoline sometimes showed evidence of the fact that lead was absorbed and stored in their bodies. The evidence consisted of the presence of lead in the excretions of the body and of peculiar changes in the cells of the blood. While the lead taken in was slight, it was nevertheless present.

An investigation of persons in districts in which ethyl gasoline had been used to a great extent failed to reveal any definite cases of recognizable lead poisoning or other diseases resulting from inhalation of the fumes. The committee, therefore, has felt that the chief dangers are to persons involved in the manufacture of this new form of gasoline, and that such precautions as need to be taken should be applied in the factory.

The committee itself realizes that the experience of the past with lead is such as to constitute a warning for the future. Ethyl gasoline has nowhere been used on a large scale in a crowded community, and under such conditions circumstances may arise that are not apparent at present.

Longer experience may show that storage of lead in the human body may lead eventually in susceptible people to recognizable lead poisoning or to degenerations of the tissues. After the use of this gasoline becomes widespread, persons must be on the watch for symptoms resulting from unconscious absorption of small quantities of lead. M. F.

COSMETICS

A MILWAUKEE newspaper studied the cosmetic habits of women of that city. It found that 136,349 women over 18 years of age used perfumery—69 per cent of all of the women in the city. The products of 171 different concerns were sold by the stores, and five of these concerns had 68 per cent of the total business.

Ninety-five per cent of the women used face powder, averaging three and a third boxes yearly; two thirds of the women used flesh tint. Althougn there are fifty brands of face powder, four brands took 62 per cent of the trade. Many druggists were compelled to carry twenty-five or more brands to suit the individual desires of Milwaukee women.

Hair "slicker" was used by 14.57 per cent of men, while only 10.57 of women found it desirable. There are sixty-five different brands of hair slicker, and five of these have 82 per cent of the business.

With the coming of bobbed hair, 30 per cent less women used hair nets. Only 35 per cent use them at all, but the average woman uses 38 nets a year.

The safety razor has done wonders for men. It was found that 94.34 per cent of Milwaukee men over 18 years of age shave themselves. Half of the number use shaving cream to the extent of almost six tubes a year. Forty-four per cent of the number use shaving soaps in bars and sticks, 2 per cent use powder shaving soap, and a little more than 3 per cent use the newer no-water-no-brush preparations.

The clean-tooth campaign has worked wonders. Ninety-seven per cent of the families in Milwaukee use some form of preparation, over 90 per cent preferring tooth paste. There are eighty-three brands of tooth paste. The average drug store carries seventeen brands, and two or three brands net 80 per cent of the business. Only 7 per cent of the population use tooth powder. There are 39 different brands of mouth washes, and about 12 per cent of the people use them.

There are 214 brands of toilet soap, of which forty-eight are popular. The average family uses sixty-four bars a year, and five brands get 93 per cent of the business. M. F.

SEASICKNESS

THE ancient Greeks knew a great deal about seasickness and were inclined to believe that a moderately severe attack was beneficial to the human body. This superstition prevails even to the present day. Ever since medicine became a science physicians have endeavored to determine the cause of mal de mer.

Dr. P. H. Desnoes, medical officer of the United Fruit Company, puts the cause as the oscillation of the ship about its various axes, and the secondary tremor and vibration from the engines on the tissues, particularly of the nervous system, that have to do with balance. As evidence he finds the statement that many sailors get seasick on changing from one type of ship to another. Persons or animals that do not possess a complete and functioning equilibratory apparatus do not get seasick. Added to the equilibratory factor are, of course, stimuli from the tissues and nerves of the digestive tract and the psychic stimuli, which may have a powerful action.

For example, there are some persons who become nauseated and vomit even if they merely go aboard a ship for a few minutes to see a friend. This effect, of course, is suffered only by those who have once been seasick and whose minds are stimulated by the repetition of the previous environment. The smell of certain foods which had been taken previous to an attack of seasickness will sometimes produce a similar attack.

Consideration of the problem by officers of the United Fruit Company causes Dr. Desnoes to believe that passengers who embark suffering from any form of gastro-intestinal disturbance,

particularly an overloaded stomach or constipation, steadily become victims, as do those who are nervously exhausted and below par from various excesses.

"The indolent life of many Latin-American women makes them more susceptible," he says, "while persons who lead an active, athletic life may be entirely immune."

The majority of passengers can avoid seasickness by adopting, a week or so before sailing, a few simple rules of hygiene and diet. These include abundant sleep, exercise in the open air, horseback riding and aquatic sports. Avoidance of excesses of all kinds is also important. Proper bowel elimination must be secured, although drastic catharsis is not desirable. Because of a tendency to acidosis, it is well to take a diet which is low in acid substances, but which includes considerable amounts of fruits of the citrous variety, green vegetables and similar substances.

After sailing, the diet should be restricted in amount and should include those substances that appeal most to the appetite. Dr. Desnoes suggests little fluid at meals, but plenty between meals. He advises also that most of the time be spent on the deck and that the mind be kept actively engaged in some diversion. Drugs may be given by physicians that will aid in controlling excessive seasickness and in quieting the irritation of the nerves. M. F.

DENTAL TRUTHS

AT A convention of dentists held recently in Chicago, emphasis was again laid in several of the discussions on the relation of diet and nutrition to sound teeth. Steadily accumulating experimental and clinical evidence indicates that the health of the prospective mother and her diet during pregnancy is as important for the teeth of the developing infant as diligent tooth brushing and mouth washing.

Heredity, too, plays a large part, and the person with sound, durable teeth is probably descended from ancestors with similar masticating equipment for a few generations back. These facts should not, however, deter any one from the practice of mouth cleanliness. The toothbrush drill has a deserved place in the health education program.

Claims are made, of course, for many tooth powders, pastes or mouth washes that are not justified by the facts. Indeed, careful brushing of the teeth with plain or salt water only is advised by some dental authorities. If tooth powders or pastes are used, they should certainly be free from such ingredients as might do physical or chemical damage to the teeth and gums. J. M. D.

TOURIST CAMPS

THE picturesqueness of our current scene has been greatly enhanced of late by the constant procession of men, women and children who are going some place in some sort of a vehicle.

The gradual development of railroad transportation has permitted the enactment of legislation for its sanitary control which serves to take care of the question of communicable diseases among the traveling public. The essay by Dr. Thomas R. Crowder in the February issue of HYGEIA was a splendid statement of the manner in which the railroads cooperate to secure proper sanitation for their cars.

Unfortunately, the business and pleasure of motor touring are as yet too new to have permitted more than a few of our states to develop proper legal regulation, although obviously such factors as inspection of interstate traffic for the prevention of communicable diseases and the provision of sanitary facilities for tourists who camp along the road are matters of immediate importance.

As is well known, many communities have established tourist camps on their outskirts with a view to offering free to tourists a place where they may stop. Tourists thus avoid polluted drinking water, and camps are laid out in such a manner as to provide properly for the disposal of sewage.

In other communities persons who might with a little more financial backing be conducting permanent hotels open poorly equipped tourist camps, which are conducted for such financial profit as may be derived from them. Obviously, here the commercial interests are dominant, and the owners of such camps frequently save on facilities but endanger the health of both the tourists and the community.

The seriousness of this problem may be estimated from the fact that 100,000 motor tourists passed into Florida from adjacent states in a single season. Moreover, numerous communities are compelled in these times to provide for traveling salesmen who have found the motor car a convenient relief from railroad and electric car transportation, and who are able to save on their expense accounts by sleeping in their motor cars.

Finally, as might have been expected, there has developed also a species known as the motor tramp, who takes to the road in fair weather, his entire wealth consisting of his clothing and the

vehicle in which he travels. This species confidently expects to live off the community through which he passes while leading his merry and lackadaisical existence.

New times and new customs create new problems in community hygiene. More and more we realize that many of man's illnesses arise from contacts with his fellow man. The automobile and particularly the vogue of touring have created many legal, criminal and health problems, which the present generation will have to solve.

M. F.

THE GREATEST PHYSICIANS

COMPARISONS are odious, and yet they are interesting. An analysis of the progress of medicine since the earliest times brings to attention at once the names of those who have contributed most greatly to its advancement. Recently medical historians have given attention to the selection of the five greatest contributors to the advancement of medicine. Opinions differ, of course, and it is much easier to select 100 than to choose five or ten. Nevertheless, there was a remarkable similarity of choice so that the names of fifteen great scientists would certainly include all of those whom the majority of medical historians would place among the first five.

In forthcoming issues, HYGEIA purposes to publish the photographs of these leaders and with each a biographical note concerning his contribution to medical advancement. Readers will be interested to find among the names several who were not physicians either in the sense that they practiced medicine or that they obtained a medical degree. Their contributions in fields closely related to the field of medicine were, however, of such moment as to give them a leading place.

Hippocrates, known as the father of modern medicine, was noted for his school and for the assembling of the Hippocratic writings which formulated our knowledge of medicine. Claudius Galen, who followed him, made many discoveries. He described the action of the heart valves, elevated the status of the medical profession and collected the knowledge of his time in a system of medicine which was followed by physicians for many centuries.

Leonardo da Vinci, noted as an artist and inventor, contributed greatly to the science of anatomy. Vesalius, who formulated anatomic knowledge in magnificent books, contributing at the same time numerous original investigations, may well be considered the father of modern anatomy. William Harvey is described as the best representative of the renaissance of medicine; he first described scientifically the circulation of the blood. About his period also was Sydenham, recognized as the greatest figure in medicine of the seventeenth century. He wrote excellent descriptions of several disease conditions and put the medicine of his day on a sound basis.

John Hunter of England is by many called the father of surgical pathology. Comrie has said of him that his descriptions of surgical conditions, his studies on the nature of inflammation and of various diseases, his success as a teacher, his collections of an unrivaled museum of surgical specimens and his skill as an operator did more to elevate surgery in technic and in repute than did the work of many other men, not excepting the great French surgeon Ambroise Paré. Auenbrugger first described the method of tapping the chest for the determination of conditions beneath the skin, and Laennec, the great Frenchman, first described the use of the stethoscope for listening to sounds within the chest, and formulated the manner in which such sounds could be related to disease conditions.

Pasteur, father of the conception of bacteria as the direct cause of many diseases, contributed greatly to protecting mankind from hydrophobia by his discovery of what is now known as the Pasteur method for controlling this disease. His discoveries have been given in several articles in previous issues of HYGEIA.

Robert Koch was the discoverer of the tubercle bacillus and advanced the knowledge of bacteriology and established it as a science. He it was who formulated a series of rules which showed definitely whether or not a bacterial organism was actively causative for a certain disease. Moreover, he developed a method for growing bacteria in pure cultures so that various forms which occur in human bodies in different mixtures might be separated from one another.

Lister showed how bacterial infection may be prevented. All of these must be added to any list of great contributors to modern medicine.

Finally, one must mention the names of James Young Simpson, William Morton and Crawford Long for their contribution to our knowledge of anesthesia, whereby surgery became painless, and all of the blessings of modern operative technic were conferred on suffering humanity.

Here is a list of great contributors to the progress of mankind, such as can be presented by but few sciences or professions. It is a list of men of which medicine may well be proud.

M. F.

BOOK REVIEWS

FROM INFANCY TO CHILDHOOD. By Richard M. Smith, M.D., Assistant Professor of Child Hygiene, Harvard University. Cloth. Price, $1.25. Pp. 105. The Atlantic Monthly Press, Boston. 1925.

HERE is another book of advice for perplexed mothers of normal infants. Although written in simple form and well arranged for practical use, it is not so attractive as many books now available, and its lack of illustrations makes it suitable only to the more intelligent readers.

Some of the advice will cause consternation and may be considered as opinion rather than authoritative statement. For example, "If a child does not like a nurse or governess, it is usually best to make a change." In a number of families, this would result in a continuous procession of governesses.

HEALTH FOR EVERY DAY. By Maurice A. Bigelow, Ph.D., and Jean Broadhurst, Ph.D., Teachers College, Columbia University. Silver, Burdette & Co., New York. 1924.

HEALTH IN HOME AND NEIGHBORHOOD. By the same authors and publishers.

THE authors of these books are both teachers of many years' experience and have written valuable books for older readers. In these health books for children they have brought their talents to bear on a problem that is engaging the interest of many educators. They see clearly that the mass of anatomic facts that have been taught little children have almost nothing to do with establishing health habits, and they have successfully omitted them from these books. They also see that young children cannot understand the complex physiologic processes on which health precepts are founded, so they make no attempt at such explanations. The books are thoroughly practical.

An easy and picturesque style makes the books attractive to children. The abundant illustrations are accompanied by questions and comments that make them a valuable supplement to the word text. The questions and suggestions at the end of each chapter are skilfully drawn. It is delightful to find, in addition to valuable chapters on accidents and dangers, play and work, rest and sleep, food and water, and other topics usually treated in textbooks, a pointed discussion of courteous conduct under the caption self-control.

The first book is chiefly concerned with personal health; the second book, while reviewing this ground and giving a little anatomy and physiology for its more complete understanding, is mainly occupied in discussing matters of sanitation. In this wider field the authors often depart from their characteristic practical course and wander into interesting but less valuable paths; as, for example, when they illustrate and describe six kinds of pumps—quite out of proportion to the sanitary function of pumps. In this book, too, allusions without explanation to things the children do not know are more common and the adaptation of the text to the child mind is less perfect.

Teachers should welcome these books because of their many virtues in managing the details of the lessons, and especially because they keep so clearly in mind the practical end of establishing health habits.

PRIMER OF HYGIENE. By John W. Ritchie and Joseph S. Caldwell. Third revision. Cloth. Pp. 184, with illustrations. Price, 80 cents. World Book Company, Yonkers-on-Hudson, New York. 1924.

PRIMER OF SANITATION. By John W. Ritchie. Third revision. Cloth. Pp. 231, with illustrations. Price, 84 cents. World Book Company, Yonkers-on-Hudson, New York. 1925.

PRIMER OF PHYSIOLOGY. By John W. Ritchie. Third revision. Cloth. Pp. 231, with illustrations. Price, 84 cents. World Book Company, Yonkers-on-Hudson, New York. 1925.

OF THIS series the third book is fairly adapted to high school students. It is an old line textbook of anatomy and physiology with abundant and good hygienic suggestions. In the third revision it has been well corrected and touched up with references to late discoveries. The illustrations are mediocre. The diction is fairly clear. Teachers who want an old style descriptive textbook will find it very serviceable.

The Primer of Hygiene is very much like the Primer of Physiology, written down to pupils of a younger age. It omits the more difficult topics and has a larger proportion of hygienic material. It seems to view the problem of health teaching from a man's standpoint and is lacking in those features that characterize the books written by teachers who have long been in touch with little children.

The Primer of Sanitation begins with an elementary discussion of cells and of disease-producing germs. Most of the book is taken up with a long list of diseases, discussing their causes (with too much attention to the kind of germ), their treatment and prevention. The text is clear and has been revised in harmony with recent discoveries. In fact some of the hypotheses recently published are accepted with rather more assurance than cautious scientists are wont to show, especially in writing for children.

Although this book is numbered two in the series and although some chapters are suited to children in the elementary grades, most of it will be found difficult even for high school pupils. It is full of useful information but is weak in its adaptability to young readers.

DIET AND CARE OF CHILDREN. By Harry S. Reynolds, M.D. First edition. Cloth. Pp. 154, no illustrations. Price, $1. Laird and Lee, Chicago. 1924.

THIS book is primarily interesting in arrangement. It is written as a large series of questions and answers. The questions are those asked by mothers in dispensary and private practice.

The arrangement is rather novel, but one wonders if, in spite of the index, it might not be difficult to find the answer to a given question. Again, the very questions of interest to one particular mother might not be contained in the list.

THE BOOK OF BREAST FEEDING. By Hester Viney. First edition. Cloth. Pp. 75, no illustrations. Price, $1. E. P. Dutton & Co., New York. 1924.

THIS is a splendid little work. It is written clearly, concisely and with good common sense. It is a book which might be read profitably not only by mothers and fathers but by physicians as well.

Pan Sings on Riverside

ELIZABETH BLAINE JENKINS

PAN is the happy spirit of Spring. When the south wind awakes and begins to coax the violets from their winter nap, Pan sits on the hills and sings for joy. Then the children say:

"Hear the robins singing! Now we shall have Spring!"

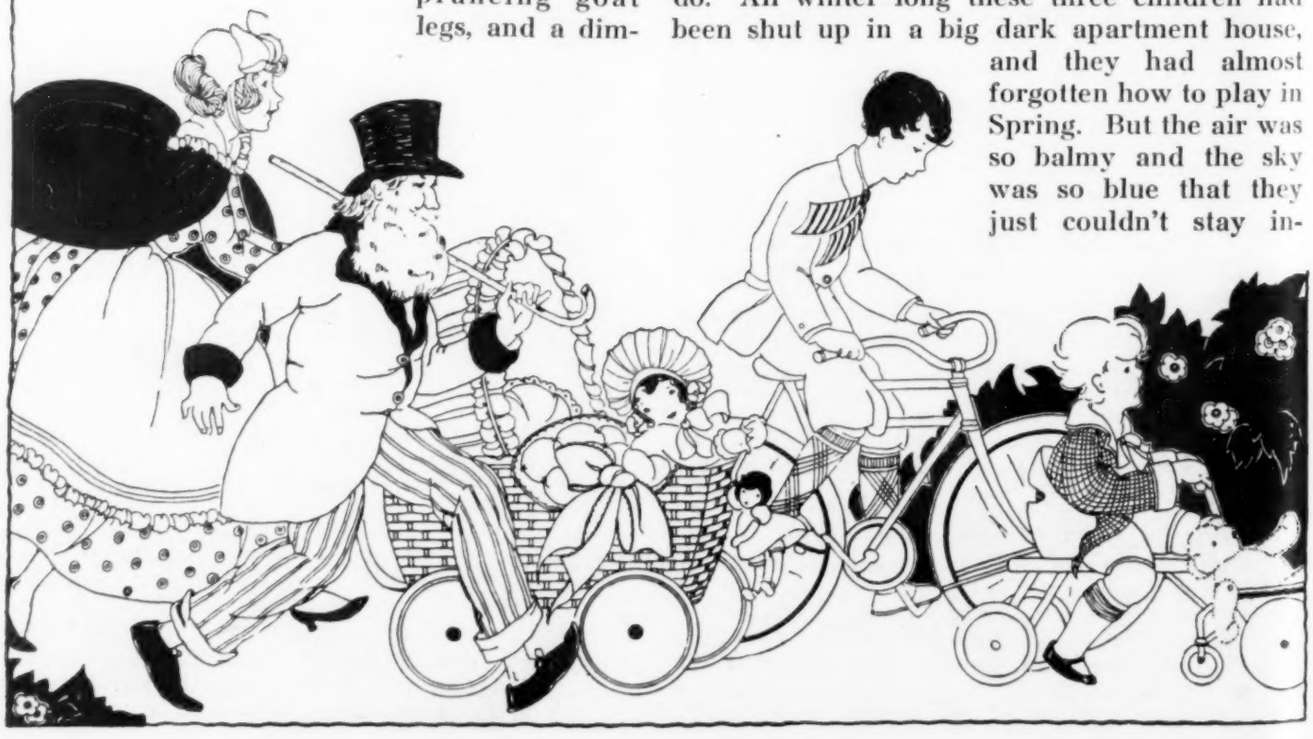
If you listen very hard when the first robin warbles in the maple tree, you will hear the song of happy little Pan.

Then all the little boys hunt their marbles and their tops, and the little girls unroll their jumping ropes, and they play in the sunshine of Spring.

Pan is a merry little elf, with furry ears, two prancing goat legs, and a dimple in his chin. He makes a harp of the new leaves and a flute of the winds, and he sings to the daffodils. If you have never heard Pan's song you must read this story; then you will know where to look for him when the violets come back and the robins sing.

Once upon a time it was Spring on Riverside—or rather it was trying to be Spring. It is the hardest thing in all the world to be Spring in a big, noisy city. If you are a bird and try to sing, you must sit in a tired old tree and wait until the automobiles go by. If you are grass and try to grow, some one steps on you. If you are just a little boy or girl, and try to play, you have to go to Riverside, and make believe you can hear the pipes of Pan! But one afternoon Pan really sang on Riverside, and this is how it happened.

Three children sat on a Riverside park bench, swinging their legs, and wondering what they could do. One little boy had a skooter; one little boy had a pair of roller skates, and one little girl had nothing at all. She just stuck out her tongue and wiggled it slowly because she couldn't think of anything more interesting to do. All winter long these three children had been shut up in a big dark apartment house, and they had almost forgotten how to play in Spring. But the air was so balmy and the sky was so blue that they just couldn't stay in-



doors a minute longer, so there they were. It might have been that Pan coaxed them out, for he was just across the River in the Jersey hills. He was singing a wild little tune that sounded like bluebirds and robins and little brooks all singing together with the voice of the wind. A little Riverside sparrow came along and said:

"Mercy-on-me, Pan, why don't you cross the River and pipe on Riverside?" Pan kicked up his little hoofs angrily and replied:

"Why, there's not an honest-to-goodness tree in the whole park, and when I turn somersaults, I bump my head on the old cracked cement!"

"But there are three little children sitting over there on a park bench, just hoping that you will come. If you don't go to Riverside, they will forget all about flowers and Springtime and May."

"Forget flowers and May? Well—that would be terrible," said Pan.

The little sparrow continued:

"I'm trying to raise a family on the Soldier's Monument, but I can't even teach them to chirp."

"Well, if that is so, I just must go to Riverside."

So Pan tucked his pipes under his arm, and took a farewell peep at himself in a shining pool.

"Gracious! I can't go looking like this. They don't wear hoofs on Riverside, do they?"

"No, but they wear almost anything else. You might be able to start a new style," said the sparrow. Suddenly he flapped his wings excitedly. "I have it. Around the corner lives a little girl who is always dressed in pink. You can slip in and borrow some of her clothes."

"I'll do that," said Pan.

He slipped around the corner and he found a pink sweater and a little white dress. In the closet he found a pair of pink socks and patent leather slippers. Everything buttoned up, all except the top buttons, and you should have seen him stuffing his little hoofs into those pink socks. He pulled a little new straw hat over his furry ears, and danced out of the house, and when he skipped down to the 125th Street Ferry, every one said:

"Look at that pretty little girl with a dimple in her chin."

Little girls are not supposed to ride on ferries all alone, so Pan snuggled up to an old lady with pink, wrinkled cheeks. Pan gave her his bunch of violets, and the old lady twittered happily.

"I used to pick violets in Spring."

The old lady made Pan feel quite happy, and he jumped gayly off the ferry boat and went skipping along Riverside Drive. He kicked up his heels so merrily that a big, wide, blue coated man squinted at Pan and said:

"That is a mighty small bit to be skipping around by herself."

But Pan went on until he came to the three children sitting on the park bench. The little boy with the skooter looked up and laughed.

"Look how that little girl kicks her heels."

"I can kick my heels too!" cried the little girl who was trying to think of something to do. She jumped up and went merrily skipping along behind Pan, trying to kick with her heels, the very way he was kicking. Thumpity, thumpity, thump, went her heels.

"I can skate faster than you can skip!" cried the little boy with roller skates.

"I can skoot faster than you can skate!" cried the little boy with the skooter.

So Pan skipped along, and the little girl skipped along, and the boys skooted and skated, until their cheeks got red and their eyes sparkled with the joy of Spring.

The next thing they knew, Pan was turning somersaults down a little green hill. Then they all turned somersaults and fell in a heap at the foot of an old, old Riverside tree. The old tree shook its leaves and whispered to the sparrows:

"Chirp, can't you? Don't you know it is Spring?"

So the sparrows chirped, and the leaves whispered merrily and some place in the shrubbery a real robin sang!

Such a happy procession followed Pan down Riverside that it looked just like a circus parade. First came the three children who skipped and skated and skooted. Then came a little boy on a velocipede, with a little red wagon hitched on behind. Then came a fat little boy on a kiddie kar, and a very big boy on a bicycle. And last came a nurse with a perambulator, and a happy old gentleman with a cane.

Nothing would have happened at all, if the hurdy gurdy man hadn't come along playing a tinkling little dancing tune. But he *did* come along, and they all began to dance—even the old gentleman with a cane.

Pan danced a queer little measure called a caprine, which is a goat dance. He walked on his hands, and he kicked up his heels, and he said, "Baa—Baa—Baa!"

Then they all tried to walk on their hands and say Baa! You would hardly believe it, but they did—even the old gentleman with a cane!

The next thing they knew, that wide, blue coated policeman came along, and a proper old lady spoiled the fun. She whispered to the policeman:

"I am afraid that queer little girl in a pink sweater has lost her mama. Hadn't you better take her to the police station?"

"There's something mighty queer about her! She certainly does not belong on Riverside," said the policeman, as he started after Pan.

Now Pan kicked his heels so hard that his little black slippers flew off, and he said:

"Baa! You old Goat! I haven't any mama, and I live just where I please. At present I am singing in the Jersey hills."

Then he ran and he ran. He ran so fast that the procession couldn't keep up with him. They just tumbled on the park benches and laughed so hard they could hardly get a good breath.

The little girl who skipped was soon left far behind. The little boy who skated began to giggle so hard that his feet wouldn't go in the same direction, and you can guess what happened to him. The boy who skooted ran right into a big statue in a frock coat, and he sat down—hard!—and panted for his breath. The little old gentleman with a big cane ran so fast that people thought the big cane was running away with the gentleman. And still he couldn't catch Pan. He sat down at the foot of the Soldier's Monument, and wiped his glasses.

"She can run just like a goat!" he panted, as the blue coated policeman went puffing by.

Then there was no one running after Pan except that blue coated policeman, and he kept grasping at the back of Pan's pink sweater. Pan jumped straight into a big deep memorial fountain, and he kicked water right into the policeman's face. Splash—splash—splash! His little hoofs made the water fly! That old fountain hadn't enjoyed anything so much since it was dedicated—which is something like being born.

The policeman sputtered and coughed and sneezed; then he wiped his glasses so he could see. He put them back on his nose just in time to see Pan skitter along a big gray wall, and jump right into the air—*and disappear!*

The blue coated man looked up and he looked down and all around, but all he could find was a pair of wet—very wet-pink socks at the edge of the Hudson River!

"That was the queerest little girl I ever saw on Riverside," said he.

But the little children didn't think Pan was queer at all. They just skipped and played in the park until evening, and all of them said:

"Let's come out tomorrow and turn somersaults down the little green hill! Maybe we shall see that little girl with the dimple."

Now I must tell you a secret—before this story is finished—only you must never tell that Riverside Park policeman.

Pan jumped over the wall and caught the tail of that little Riverside sparrow!

"You got me into this; now you take me right back to the Jersey hills!" he said, as he made himself very small, and climbed on the sparrow's back. So the sparrow took him back to the woods and the hills, for Pan couldn't be happy away from the woods of Spring!

HEALTH NEWS AND VIEWS

NEW INDICATOR OF IRRITABILITY

A new use has been found for the knee jerk, previously used diagnostically in relation to many diseases of the spinal cord. It is believed that the extent of the kick is a sensitive indicator of irritability. Whatever affects the activity of the central nervous system affects the response of the knee jerk to stimulus.

Miss Emily Williams has recently made some studies along this line among students at the University of Illinois. Within a group examined under carefully controlled and similar conditions, she found the average height kicked in response to stimulus was greater in women than in men.

Some may consider that this indicates a greater nervous irritability in women than in men, but it must be remembered that this would be only an experimental conclusion. The worth of the findings lies in their diagnostic value.

HOW THE LAW AND SCIENCE VIEW CRIMINALS

The law is interested in the thing the person does, but not his moral, mental or physical makeup, whereas the psychiatrist is interested in crime in its relation to the social group, not to the individual who is mentally sick.

So declared Dr. William A. White of St. Elizabeth's Hospital, Washington, D. C., in a recent address. Dr. White compared this attitude, toward which science is tending, with the method of treating smallpox, for example. In both cases there is an enormous community instinct involved. "We are not interested in the guilt, therefore, but in the antisocial act," he said.

Two courses to be pursued are the protection of the group and study of the individual to find out what can be done for him. Dr. White urged the reclamation of these persons whenever possible, and the banishing of old-fashioned methods of dealing with crime and its punishment., A program of practical work, such as discovering prospective criminals among children, was suggested.

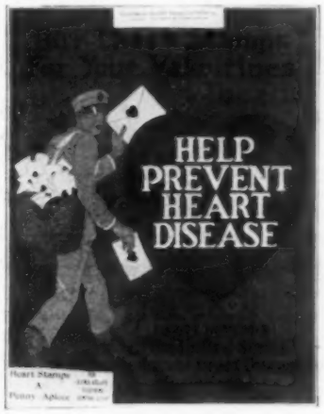
Dr. White criticized our present system of parole and the legal methods now used for dealing with insane criminals, although he considered it well for science to be held in check somewhat by the more conservative legal element. He foretold that our punishments will have a rehabilitating effect, in the medicolegal sense. In conclusion, he pointed out that it is not the psychiatric solution of our criminal problems that will be difficult, but the carrying out of the plans.

GOOD TEETH AND SCHOOL WORK

A 60 per cent increase in efficiency after proper dental treatment was demonstrated in Cleveland as a result of a test made recently. In the case of school children, bad teeth and low standing have been shown to go hand in hand. In New York, Dr. Luther H. Gulick examined 400,000 children and found that those with two or more bad teeth averaged five months behind the grade they should be in, according to age. This has also been observed in Toronto schools where tests have been made. Wallis of London, one of the first to investigate the conditions of children's mouths, says that those with the most highly septic mouths are frequently two grades below those of their age.

NEW KIND OF VALENTINE

Valentine stamps in the shape of hearts were sold and used during February to raise funds for the Chicago Heart Association, which has for its aim the prevention of heart disease. These stamps made a cheerful St. Valentine's Day greeting of even a business letter, and the money raised by their sale will help prevent much sorrow and suffering.



The drive for 850,000 started the first of February. The small heart stickers sold for a cent each and were distributed by the women's clubs in the city and were also on sale at the various department stores.

Heart disease was the cause of one out of every seven deaths in Chicago in 1924. The money raised by this drive will be used to extend the clinical facilities and research work necessary to combat and check this disease.

CHILDISH DEFECTS AND TYPES

Children will not outgrow the defects incurred between the ages from 2 to 7, according to Dr. Charles Leroy Lowman, orthopedic surgeon of Los Angeles. However, these defects can be overcome by proper remedial care and exercise. The majority of our children have postural or organic defects at this age, which Dr. Lowman refers to as the neglected age. It is at this period that the organic and skeletal growth needs are greatest, yet this is the period when the least attention is given.

Weak hearts, lungs affected by faulty posture, faulty elimination and unstable nervous systems are among the organic defects mentioned by the physician. Flat feet, round shoulders and spinal faults form the largest part of the skeletal defects. Properly supervised play and games of the right sort are also advised as remedial exercises.

Dr. Lowman groups children according to three types, lithe, medium and heavy. The mental traits of a child correspond to his physical classification. The medium child presents no problems, the lithe child must be restrained and the heavy one stimulated. Ill health in later life may be traced to overstimulation of the lithe type, Dr. Lowman says.

HEALTH EXPOSITION IN GERMANY

An Exposition for the Care of Health, Social Care and Physical Exercise will be held in Düsseldorf, Germany, beginning in May. The exposition, which has been organized by the city of Düsseldorf, will be conducted by the German republic, the state of Prussia and the German Museum of Hygiene. By way of advertisement there are being distributed attractive booklets and other printed matter, copies of which may be obtained for further distribution from the Exposition, Postschliessfach 10006, Düsseldorf, Germany.

PUPILS CHART GOOD HEALTH HABITS

Pink charts of health habits for each school child will, by awakening the child's interest, make it easier to form those primary habits so necessary to good health. The Chicago Tuberculosis Institute suggests

	Clean Hands Brushing Teeth					Baths
Names of Pupils	M	T	W	T	F	
John Wilson	11	01	11	10	11	1
Jane Reed	11	11	+	+	+	1

this chart, printed on attractive pink paper, to be kept in school and marked at the end of each day's session.

Space for fifty children for several weeks is provided. The teacher marks a figure one in the square when the habit has been performed that day; she marks a zero when it has not. In case of absence, a minus sign is put in the square, to be changed to a plus if the child shows that he has performed the habit at home.

A classification of school and home health habits should be made and one or two stressed each week.

School habits would include personal appearance and neatness, posture, attitude, safety for others by covering mouth and nose when coughing and sneezing, safety for self by removing outer clothing and rubbers in schools.

Home health habits may be chosen from such as sleep, diet, cleanliness and exercise. These must be defined at the beginning, the number of hours sleep at night, number of baths a week, and so on, being clearly indicated.

TEXTILE MILL INSTALLS REST PERIODS

A greatly lowered efficiency and a huge labor turnover in the spinning department of a textile mill was found to be due to fatigue on the part of the workers. Any work that requires muscular effort and produces muscular fatigue, yet allows mental activity apart from the work, brings about this condition, according to Janet and Kleitinan, two investigators who have made a study of it.

The monotony of the work, combined with the physical weariness, produces a state of reverie that is often pessimistic and results in crises which lead the workers to quit the factory.

In one factory, four ten-minute rest periods were introduced into the ten hour day. Cots were placed in convenient locations, and rest in a horizontal position with complete relaxation was given. Lessons in relaxation were given also, and the periods were regularly observed. The result was an increase in efficiency of from 70 to 80 per cent, with a corresponding reduction in the labor turnover. The mental state of the workers was also greatly improved.

AFTER-CARE IN COMMUNICABLE DISEASES

Heart and kidney diseases, tuberculosis and other maladies follow in the path of every infectious disease. Deafness, chorea, arthritis, marked anemia and purulent rhinitis are some of these.

In a group of 850 children recently recovered from scarlet fever, examination showed that 30 per cent had one or more of these defects as a result of the scarlet fever. Over 10 per cent had some sort of heart disturbances.

As a result of this examination, the health department of New York City strongly recommends a follow-up system for school children who have had any communicable diseases, as scarlet fever is not alone responsible for defects of this nature.

Children who have recovered from any infectious disease should be examined frequently and, if defects are found, should be given prompt and proper care. Frequently, parents are not aware that anything is wrong, but it is suggested that the family physician and school authorities can cooperate to prevent the serious trouble that would follow if these conditions were left undiscovered and untreated.

A DIET LESSON DURING LUNCH HOUR

That teachers should guard the children's health by inspecting their lunches is the recommendation of the New York City health department. As a rule, the children eat in groups on the playgrounds, and if the teacher will join these groups, she can give a few simple lessons on diet and proper eating conduct.

Parents do not always provide a well selected meal for their children, and if the child has a preference for one kind of food, the meal is apt to become poorly balanced. Observing this, the teacher can instruct the child in food values and the importance of certain foods necessary to growth, good health and happiness.

The domestic science teacher can cooperate with parents and children by suggesting weekly lunch menus. These can be written on the blackboard on Fridays, and the children can take home copies for the mothers. A typical list of menus reads as follows:

MONDAY

Glass of milk, peanut butter sandwich, pound cake, banana.

TUESDAY

Glass of milk, lettuce and tomato sandwich, graham cake, orange.

WEDNESDAY

Glass of milk, hard-boiled egg sandwich, fruit cake, apple.

THURSDAY

Glass of milk, cream cheese and chopped olive or nut sandwich, cookies, grapes.

FRIDAY

Glass of milk, jelly or jam sandwich, angel cake, pear.

The daily menu will of course be changed from week to week, substituting cold meats for sandwiches, creamed vegetable milk soups and chocolate candy in place of milk and cake.

Children who are able to buy warm lunches in the schools may eat cocoa or simple custards, instead of milk and creamed vegetable soups, and spaghetti instead of sandwiches.

This sort of cooperation between parents, teachers and children will do much to reduce the number of cases of malnutrition in the schools.

GOITER PREVENTION IN SYRACUSE SCHOOLS

At the end of one year of goiter treatment among school children in Syracuse about one fourth of the children treated were found, on reexamination, to be without need of further treatment.

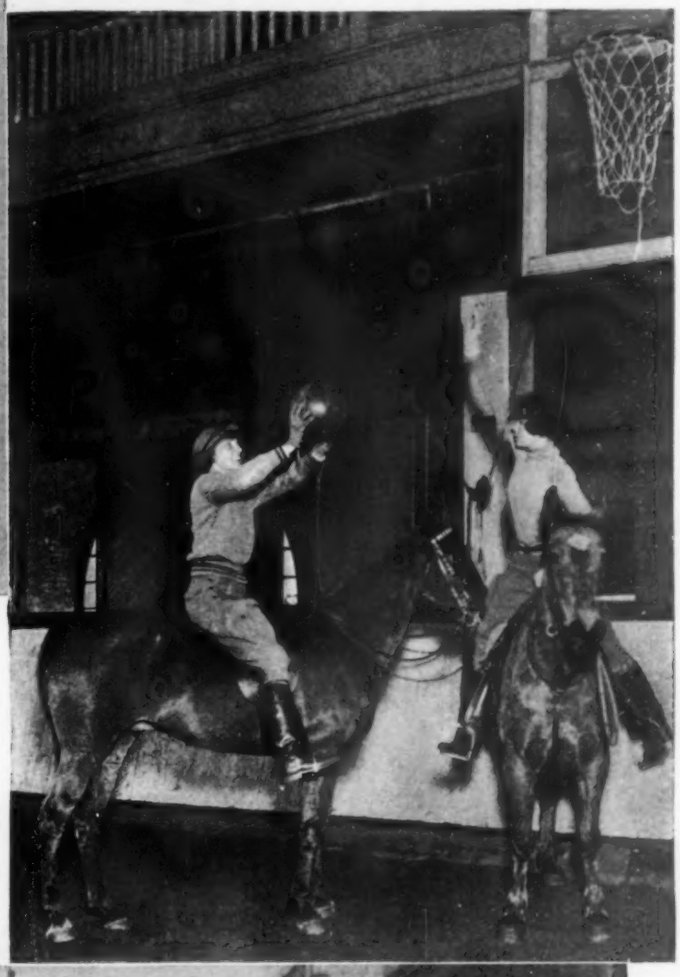
The method used was to send to parents of children who showed a pregoitrous condition, or fully developed goiter, notices calling attention to the fact, with instruction on the prevention and treatment of goiter, together with the advice that a physician be consulted. In cases in which this advice was not followed, permission was obtained for the school nurse, under the direction of the school physician, to administer iodine tablets.

The success of the last two years has been such as to warrant continuing the treatments.

Pacific and Atlantic

MARATHON ON SKIS

This healthy looking girl is training for the famous Swedish ski marathon. The race is run in March over fifty-seven miles across country.



Basketball on horseback must be an exciting game. It is a new fad among Washington society girls, two of whom are shown here.

Nonsmokers won a forty mile hike from smokers in a contest to test the effect of smoking on endurance. This picture shows the start in Los Angeles.

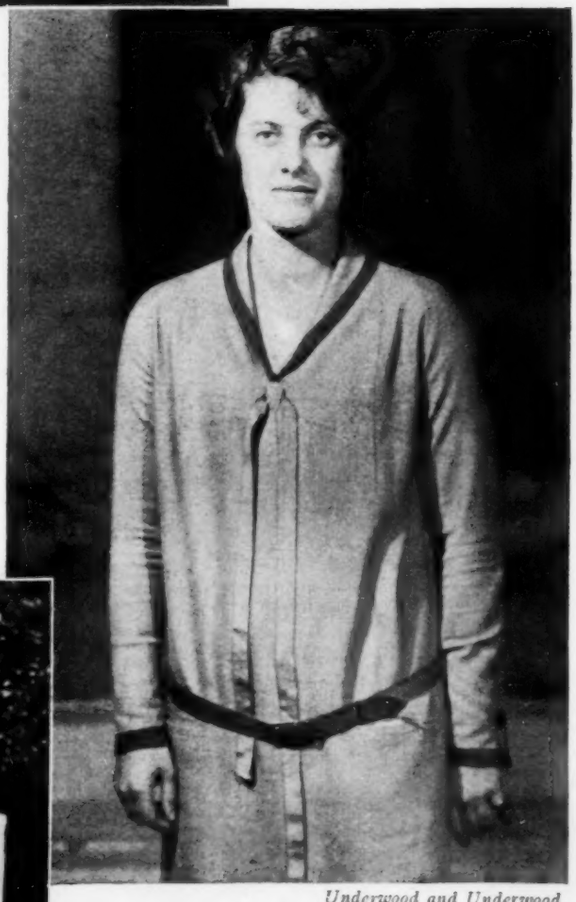
Pacific and Atlantic

Underwood and Underwood

Pacific and Atlantic

NEW COOPERATIVE HEALTH NURSERY

Careful supervision in their new cooperative nursery insures perfect health for these children of the faculty and graduate students of the University of Chicago. The nursery orchestra is about to begin a concert.



Underwood and Underwood

WINNER OF HEALTH CONTEST

Judged on form and posture, this girl won a health contest at Barnard College. She attributes her almost perfect health to swimming, at which she is an expert.

Pacific and Atlantic

ANIMAL AMBULANCE

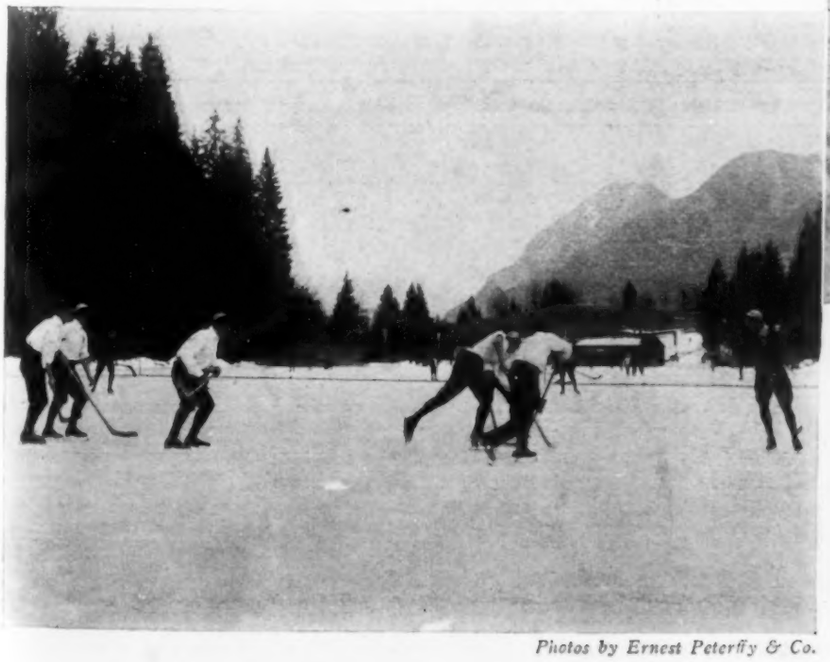
This new kind of ambulance is for animals hurt in motor accidents.

These rosy-cheeked children of Ober-Ammergau are having lots of fun on the snowy slopes behind the village.

WINTER SPORTS IN BAVARIA

Sji-kjöring behind a pony over the ice is one of Bavaria's thrilling winter sports.

Plenty of ice for skating and hockey is always to be had on this lofty Bavarian lake, 2,300 feet above sea level.



Photos by Ernest Peterffy & Co.

WARM LUNCHES FOR RURAL SCHOOLS WITH LITTLE TROUBLE OR COST

A simple and inexpensive method for serving children in rural schools with a warm lunch has been formulated by Miss Jeannette E. Pugh, R.N., and has been carried out with success in a number of Wisconsin districts.

The cost of equipment for a small school with the best material is only $8. Not more than ten minutes of the time of teacher or children is required for the actual heating and serving, including a preliminary wash-up on the part of the pupils. Besides this saving of time and money, the extreme simplicity of the method, together with the fact that each child may satisfy his and his parents' desires in regard to the food he eats, makes it well worth a trial.

Each child is provided with his own can or mason jar; this he takes home in the evening and brings back in the morning filled with previously cooked food capable of being reheated, such as soup, cocoa, cereals, vegetables, puddings and even raw eggs in water. He may bring, in addition, whatever else he desires in the way of cold food.

These jars are placed in a specially constructed rack into which they fit and which, in turn, fits into an ordinary wash boiler. The lower rack must be two inches above the bottom of the boiler to prevent the jars from resting on the bottom. The local hardware dealer should be able to make these racks.

Only about an inch of water should be used in the boiler, and at ten or eleven o'clock the teacher puts the outfit on the stove to heat. It should actually steam for from twenty to thirty minutes. At noon the food is ready for distribution, each child receiving his own jar.

Before the distribution, the children pass along a line in which they are provided with liquid soap (either commercial or home made), water from a fountain faucet, paper towels and tooth picks, with which they clean hands and finger nails.

It will be observed that in this method there is no insanitary handling of the food; the outfit takes up very little space and requires no dishwashing or other cleaning up; odors from the cooking are eliminated and the teacher is relieved from the task of preparing the warm dish.

SICK LEAVES OF MEN AND WOMEN

The belief that women engaged in industry are absent from duty on account of illness to a much greater extent than men is inaccurate, so far as public library workers are concerned.

The Bureau of Public Personnel Administration, with the cooperation of the American Library Association, has recently conducted a questionnaire in sixteen public libraries in the United States. The result shows little difference between men and women in the number of days absent on sick leave with pay. The average amounts taken during the year were 4.9 days for men and 5.8 days for women.

However, of the 1,748 persons checked, there were 1,640 women and only 108 men, so that the slight difference in days of sick leave has relatively little significance. The average amount for women has been found to be practically the same as for men engaged in other branches of the public service (from five to seven days usually).

Not much difference was found in the amount of sick leave with pay for the different age groups. The smallest amounts are taken by women under 18 and by men over 60, while the largest amounts are taken by women from 21 to 25 and by men from 51 to 60.

There was apparently an increase in the amount of sick leave with an increase in the size of the library and of the community in which it is located. This may be due to a number of factors, such as the increased strain of work and life in larger communities, and the additional importance of the individual in a smaller organization.

PRECAUTIONS FOR MACHINISTS

Machinists are urged to avoid cuts, scratches, boils and infections, in a recent bulletin of the Industrial Hygiene Bureau of New York.

The danger of infection and blood poisoning through very slight cuts and scratches cannot be overemphasized, since cutting oils and cutting compounds often carry germs. It is important that all injuries, even the smallest, and boils, pimples or other skin abrasions be dressed at once.

Extreme personal cleanliness, by means of frequent baths and changes of clothing that has become saturated with oil, is advised. A good cleaner that will cut oil should be used to wash the hands and arms at noon and at night. Alkali water is to be avoided for washing.

Keeping the oil free from pollution is as important to others as to the worker. Spitting into reservoirs or doing anything else that will pollute the oil is a source of great danger, and should be stopped. As a further guard against infection, each worker should use his own towels for wiping.

Smiling faces, alert minds, clean teeth and healthy bodies for this group of Arkansas school children pictured here at their daily toothbrush drill led by the teacher.

QUESTIONS AND ANSWERS

If you have a question relating to health, write to "Questions and Answers," HYGEIA, enclosing a two-cent stamp. If the question is of general interest, the answer will be published; otherwise it will be sent by mail. Questions are submitted to recognized authorities in the several branches of medicine and answers framed by them. The names of correspondents will not be published. Diagnoses in individual cases will not be attempted nor treatment prescribed. Answers to questions relating to beauty will be found in the "Healthful Beauty" department of this magazine.

Truth Serum

To the Editor:—Is scopolamin, the so-called truth serum, a narcotic? Does it really produce truth telling results? How is it administered?

F. H., Missouri.

Answer.—Scopolamin, or the apparently identical drug known as hyoscin, has long been used as a sedative in states of muscular restlessness. It is, however, not a narcotic and, except in doses that are large enough to be poisonous, it has little or no effect on the mind.

In recent years it has been used extensively in combination with morphine, a derivative of opium, as an anesthetic either alone or with chloroform.

The evidence on which rests the claims that the drug will make persons under its influence tell the truth is quite unreliable, and can readily be explained on other grounds. It is quite possible to produce similar results by means of hypnotism, without the use of drugs at all. Hypnotists sometimes use sedative drugs or flavored water as an aid in putting people into a hypnotic trance.

Probably the most that could be claimed for scopolamin is that it produces a state of relaxation and thus favors a hypnotic type of sleep. But even in this state there is no assurance that a person will tell the truth. He may, and often does, tell things that apparently he has been unable to remember during the waking state. At the same time he is also in this state highly susceptible to the suggestions of the person who puts him into the trance, and his answers may often, perhaps unconsciously to the examiner himself, be suggested by the questions put.

Hypnotism used to be much in vogue as a means of exploring the hidden memories in a person's mind, but it has to a large extent been given up since it has been found entirely possible, even though it may take a longer time, to bring these memories to light with the patient fully awake. Scopolamin has been studied extensively by pharmacologists all over the world, and the results of these studies give no evidence of its effect on the mind. It is a poisonous drug and must be used in very small doses.

Insanity Among Women

To the Editor:—Do you know what percentage of women in insane hospitals are there because of feminine ills? I have heard that two thirds of them are. Please advise me if it is neglect of a disease condition of the generative organs that leads eventually to cancers. Where can I obtain reliable information calling attention to ulcers, tumors, abscesses and cancers? F. E., Iowa.

Answer.—The proportion of women admitted to hospitals for the insane because of disease peculiar to women is very small, so small that no special group is provided for them in the tables in use for classifying the causes of the mental diseases.

This does not mean that many women in insane hospitals do not have minor ailments of the genital tract; quite a large proportion do, but the number is probably no larger than in women outside such hospitals of the same age, civil state and number of children. It is probably to figures indicating the number of such minor and occasional major ailments that the inquirer refers. In the majority of patients admitted to hospitals for the insane, there is little difference in the kind of mental illness between the two sexes.

A tabulation of such ailments found among the patients in one of the Illinois hospitals was published about twelve or fifteen years ago in the *Institution Quarterly*. Similar reports of findings have been made in other places, but it is important to distinguish between actual causes of mental disease and mere concomitants.

Too little is known about the causes of cancer to warrant a reply to the question about neglect of the generative organs. Chronic irritation is generally considered a contributing cause.

Some information about ulcers and tumors is contained in the pamphlet in the cancer series published by the American Medical Association.

Froude and McCann

To the Editor:—In our hygiene class the discussion of the following questions on Froude and McCann came up. If you will please answer them, I will present the answers to our class. 1. Froude and McCann assert that white flour and granulated sugar (both dangerous, they say) are not protested against by legal and medical authorities because of fear that it would hurt business. What do you think about this? 2. Froude urges the minimum intake of food, especially no breakfast and occasional fasts. Is this right? 3. McCann's "Science of Eating" describes what he calls poison squads, the two rankest of which are the Madeira Monroe case (p. 169) and "Kronprinz Wilhelm" (p. 192). In both of these cases he asserts that medical authority was confused and lacking and that reports of these, especially the latter, were not allowed to be published for fear of hurting business and medical prestige. 4. McCann declares that the dyes used (coal tar, probably) in candy and ice cream are dangerous poisons. Is this true?

R. H., Ohio.

Answer.—Presumably the Froude and McCann referred to by our correspondent are, respectively, C. C. Froude and A. W. McCann. In the opinion of HYGEIA nothing that Froude may say on the subject of diet or nutrition should be taken seriously, and but little that McCann may have to offer. Froude is a chiropractor who published a book entitled "Right Food the Right Remedy," which was criticized in HYGEIA for September, 1923. The book was largely a compilation of banalities of elementary dietetics and the exploitation of pseudoscientific fads.

1. When bread constitutes the sole or principal article of diet, there is advantage in using whole wheat flour, because the parts discarded in the milling of white flour contain important food substances. When bread, however, is used as a part of a mixed diet containing green vegetables, fruits, milk, butter and the like, an abundant quantity of these sub-

stances is obtained in other ways, and white flour is perfectly wholesome. There is no danger in the use of granulated sugar, except when it is used to excess. There is a decided tendency among Americans to eat too much sugar.

2. It is probably true that most persons eat too much. Few, however, especially those who work, can get along without breakfast. Occasional fasts for a day or two have been found helpful by many, but they are not well borne by others.

3. We are not familiar with the comments of McCann on the so-called poison squads, and can offer no opinion except that most of the medical journals published certainly do not suppress facts for fear of hurting business and medical prestige. No profession has more constantly published facts that might appear to be injurious to its selfish interests than has the medical profession.

4. The use of harmful dyes in candy is controlled by federal and state laws. Moreover, harmless dyes are so abundant and cheap that there is little inducement to the manufacturer to use other material.

Child's Diet

To the Editor:—What is the correct diet for growing children between the ages of 12 and 18? Give a general list of foods that contain the desired nutrients and the proportion of each required for a balanced meal. Other suggestions concerning proper diet would be greatly appreciated.

R. L., New York.

Answer.—The diet for children between the ages of 12 and 18 does not differ in essential particulars from that suitable for an adult. A larger amount of food is required by a growing child, and the avoidance of rich foods is even more important than in the adult.

A standard book on diet, such as Benjamin Harrow's "What to Eat in Health and Disease," published by E. P. Dutton and Company, New York, will be useful. The price is $2.

Atrophic Rhinitis

To the Editor:—Would atrophic rhinitis cause mucus to form in the throat? Is there a permanent cure for this trouble? Would swimming aggravate it or make the swimming pool dangerous for others? Is this catching; if so, what precautions might be taken?

G. M. W., Iowa.

Answer.—Atrophic rhinitis is a rare, chronic disease of the nose, usually beginning in childhood and lasting throughout life. It varies much in severity, becoming milder as the years go on. Complete recovery probably never occurs in any definitely established case. The cause is not known.

Within the nose certain bony structures are gradually absorbed, leaving an abnormally broad nasal space. The mucous glands, the blood vessels and other structures of the soft tissues within the nose become altered. In this changed mucous membrane bacteria grow. The altered structures of the nose, coupled with the growth of bacteria, produce a thick, foul smelling secretion, which, by reason of the broad nasal space, tends to dry out and stick as a thick crust to the inner surface of the nose. The odor is often foul, although the patient himself may not perceive it. The nose may feel irritated and uncomfortable.

Complications of these usual disease processes may occur. The most common is the extension of the disease into the throat back of the nose, and even into the larynx. Clearing of the throat, a hacking throat cough, due to the irritation of sticky secretions, and at times hoarseness are common.

The general health is impaired by the disease, sometimes little and sometimes considerably. The disease is not contagious. Swimming aggravates it, and may lead to severe complications involving the ears or the sinuses. The swimming pool water will become contaminated.

While the disease cannot be cured, treatment is extremely important. From a social standpoint, elimination of the odor is necessary to a normal social and business life. From a health standpoint, treatment lessens the severity of the disease and tends to prevent the complications of the ears, throat and sinuses. The aid of a physician who possesses the technical skill required to study the interior of the nose is necessary.

The principles of nonsurgical treatment consist particularly in the persistent cleansing of the nose, followed by the use of mild antiseptics. The physician should direct the treatment. This, when carefully adapted to the patient, carried out twice every day, and varied when necessary, should practically control the odor. The general intensity of the disease will be mitigated, and the danger of complications much reduced. Methods of douching the nose that require the head to be thrown back are dangerous to the ears, and should never be used.

Surgical means of treatment are much less commonly called for. Surgical treatment is mostly carried out in order to treat complications affecting the nasal sinuses, and such treatment may be of the first importance. Another principle of surgical treatment consists in methods aimed at filling up partly the abnormally large breathing space. Such methods are sometimes helpful, but they are not as yet commonly employed.

Phlebitis

To the Editor:—I am writing you in regard to phlebitis. I had typhoid fever and was confined to bed for eighty-five days. About the twenty-eighth day, phlebitis set in. Would you please tell me the nature of phlebitis? Can it be prevented? Do people ever completely recover from it?

L. W. A., Colorado.

Answer.—Phlebitis means inflammation of the veins; it is one of the common sequences of typhoid fever. There is no certain way in which it can be prevented, although prolonged rest during convalescence would undoubtedly be helpful.

Usually recovery is complete in time, though the effects of the trouble may be felt for a long period.

Diabetes and Acidosis

To the Editor:—Is acidosis in a diabetic patient the same as acidosis in a patient not having diabetes? Is acidosis the only cause of diabetic coma, other than insulin coma? What will insulin do to a person who has normal pancreas? What can you tell me about the theory of giving insulin any time that sugar may appear and not giving it for a day or two again if sugar does not show?

C. A. T., Massachusetts.

Answer.—Acidosis in diabetes is due to the accumulation within the body of the so-called acetone bodies that have escaped oxidation. With the onset of symptoms, all the body alkali available for neutralizing these acids has been exhausted.

This same type of acidosis may occur in other conditions, such as starvation, especially in the obese, recurrent vomiting, and acute infections in the young. There are other types of acidosis, such as that due to the retention of phosphoric acid in nephritis and carbon dioxide retention in certain pulmonary conditions.

Coma may develop in an apparently healthy person for reasons too numerous to enumerate. Any one of

these causes would precipitate coma in a diabetic. However, in certain types of diabetes, one must always consider the possibility of hemorrhage into the brain and uremic coma. Coma due to brain lesions (skull fracture, concussion, hemorrhage or encephalitis) in nondiabetic patients may simulate diabetic coma because of the appearance of sugar in the urine, but the sugar is not usually associated with acetone bodies.

Insulin acts the same in normal as in diabetic persons. Hence the result of its injection will be determined by the dose of insulin given and the supply of glucose available. A given dose of insulin enables the diabetic to burn a fixed amount of carbohydrate. If a patient's daily glucose requirements consist of 140 Gm., and his tolerance takes care of only 100 Gm., then the extra 40 Gm. may be burned with insulin. Since the effect of insulin given subcutaneously lasts from six to eight hours, it is obvious that its sporadic administration is to be condemned.

Whooping Cough

To the Editor:—If a person has had whooping cough even lightly in childhood, is there any probability of his having it again? Can a third person who has had whooping cough carry it from a child who has it to one who has not had it? How effective is the vaccine used against whooping cough in lessening the severity and shortening the duration of the disease in a child who has been coughing for four days before the first injection of the vaccine? In the case of a younger sister of the coughing child, if the injection is first made on recognition of the disease in the older child and before the younger one has had more than two or three single coughs, which would not be noticed under usual circumstances, how effective is the vaccine? H. S. B., Maryland.

Answer.—Whooping cough is a disease that usually protects for life, though not invariably.

Conveyance of whooping cough through a third person is rare, but is possible. Infection is conveyed by the sputum or mouth spray. One who had been in intimate contact with an infected child and who shortly after, without change of clothing or washing the hands, came into contact with a third child might possibly convey it.

There is a difference of opinion among physicians who have used the vaccines against whooping cough. Some trustworthy and competent observers have thought that they noticed distinctly good effects. Others, a considerable majority of equally competent men, have been disappointed and do not use vaccines. The earlier they are used, if they are effective at all, the more likely they are to help.

Soap Stick

To the Editor:—I have been using a soap stick for the last month to train my baby. He is four months old. The bath comes at 8: 30 a. m., and just previous to this I place him on the chamber. Up to the present time he has had only two voluntary movements. The stool has always been smooth, soft and well digested. I am anxious to know if he has formed the habit of needing or waiting for the soap stick, and if so how this can be corrected. Would you consider the soap stick habit at this age one that will become chronic and hard to correct? B. E. K., Illinois.

Answer.—The soap stick is perhaps as little harmful as any method of inducing bowel movement in a child, but neither this nor any other means of exciting such movements should be used any longer than is necessary. The soap stick may be made gradually shorter and smaller, and thus it may probably be dispensed with in a little while. The most important thing is to see that the child is placed in position to have a bowel movement at regular intervals and at exactly the same hour or hours each day. If this is done, if a reasonable amount of water is taken and if food suitable for the age is given, there should be no difficulty in developing the proper habit.

Deafness

To the Editor:—I am afflicted with deafness, and I should like to know whether science has discovered anything to stimulate dying auditory nerves. Is there no relief for this condition? Will strychnine or potassium iodide help? If so, give me the proper dosage. G. L. M., Mississippi.

Answer.—Certain diseases that cause degeneration of the auditory nerves may be cured by proper treatment. Chief among these is syphilis; but only in the early stages of involvement of the nerve is a large degree of recovery to be expected. Malaria may cause a neuritis of the auditory nerve that yields to quinine, if treatment is begun before degeneration of the nerve is advanced. Once nerves are really dying, there is no form of treatment that will restore them to life. Strychnine is useless, and iodides only in syphilitic diseases are of help.

The person who is afflicted with degeneration of the auditory nerves should take up the study of lip reading in earnest.

Bronchiectasis

To the Editor:—I have distended bronchial tubes and have considerable trouble in getting rid of accumulated phlegm. What might be helpful in such cases? R. M., Wisconsin.

Answer.—In many cases of chronic bronchial disease, the accumulation of secretion has been removed with a bronchoscope and a suction apparatus. The direct application by a physician of a dilute silver nitrate solution to the bronchial tree has often been of benefit in these cases. In other instances, dilute epinephrine solution has been applied to the small subdivisions of the bronchial tree and has given considerable relief in asthma.

Cases of bronchiectasis are apparently due to the constant dropping down of pus from the sinuses, which causes infection of the bronchial membranes. The proper treatment of the nasal sinuses, causing a diminution in the formation and the dropping of pus, often gives considerable relief.

Eczema in Child

To the Editor:—Is eczema of three years' duration curable in a child 6 years of age? She is the youngest of a family of eight and the only one affected. It has almost entirely disappeared at times, only to come on again. Some of the symptoms are ear ache, discharging ears, frequent colds, nervousness and irritability. Tonsils and adenoids were removed several months ago. I should like to know if eczema is ever caused from hereditary syphilis. Please advise me as to diet and guidance. L. A. B., New Hampshire.

Answer.—The course of eczema is so variable and its causes so diverse that it is impossible to tell definitely whether or not a given case is curable. An opinion might be formed if it were possible to see the child, obtain a complete history and make the necessary examinations.

Advice as to diet and care could not be given except by a physician in direct charge of the case, and it is suggested that you arrange to have the child seen by a doctor.

Eczema is never caused by hereditary syphilis directly, although it is conceivable that the latter disorder, through its effect on the general health of the child, might be a contributing factor.

CURRENT HEALTH ITEMS

WHY BABIES DIE

DATA from eight investigations of the Children's Bureau, comprising some 24,000 urban births, have been thrown together for the purpose of a statistical study by Robert Morse Woodbury on "Causal Factors in Infant Mortality."

Dr. Woodbury, who is connected with the Children's Bureau, U. S. Department of Labor, has done an immense amount of careful work on the material. The Children's Bureau has consistently championed the idea that economic factors are largely responsible for infant mortality, and, after discussing numerous other factors, Dr. Woodbury concludes that "low earnings of the father exert a potent influence over the prevalence of these factors and therefore must be regarded as primarily responsible for the greater mortality associated with them." In short, the way to save the babies is to pay their fathers higher wages.

Many students will feel that such an analysis is superficial, and that the data of the Children's Bureau are not gathered in such a way as to reveal the primary factors involved. It is a tenable hypothesis that the father's wages reflect more or less accurately his physical and mental ability; that low wages go to fathers who are, on the average, genetically inferior; and that the child dies because it comes from poor stock, and not merely because its father got a given number of dollars in the pay envelope every Saturday night. In other words, it is the parents' heredity, and not their bank balance, that primarily determines the fate of their offspring. Doubling the pay of laborers would not reduce infant mortality to anything like a corresponding degree.

If this view of the case represents anything like the truth (and there is strong evidence, not brought out by any of the Children's Bureau investigations, or mentioned by Dr. Woodbury, that it does), the implications are extremely important. Prevention of infant mortality is then to be sought in the first place by eugenic measures and not, as the Children's Bureau seems to suppose, by "economic justice."

THE DANGLING LEGS OF OUR CHILDREN

MUCH of the bad posture and the resultant physical defects of school children are due to seats that are too large, thinks H. E. Bennett, writing in the *Sierra Educational News*. A child's seat may be a few inches lower than the approved seat height without any serious consequences. For some reason, however, it is much more common to find the child in a seat too large for him. This results in discomfort, especially if he cannot place his feet squarely on the floor. Then he wriggles and squirms and finally ends up in some distorted and unhygienic position in order to gain support for feet, legs and back.

The average child can be seated in a seat one fourth of his standing height with perfect comfort and health safety. The rest require seats slightly lower. On the whole, it is better to err on the side of lowness.

If the heels of the child do not touch the floor, or if with his feet squarely on the floor, there is any pressure under his knees by the seat, the seat is too high.

INJURED NERVES FOLLOW INJURED BODIES

MORE neurotics develop among industrial workers as a result of improper after-care than as a result of the injury itself, in the opinion of Dr. Paul B. Magnuson in a recent article in the *Nation's Health*. Workers who have been injured often develop a nervous condition that is more serious and more disabling than the original injury. This condition should not be attributed to shock or further extent of the injury until other factors have been looked into.

It often happens that a person will return to work several months before he should. This results in a relapse and case of sick nerves. On the other hand, if a man stays away from work too long after he has recovered partial health, the strain of enforced idleness and financial worry may cause the same nervous condition to develop.

A middle course of moderation should be pursued in these cases. By giving the worker light work, or smaller amounts, his newly gained strength will not be overtaxed, and he will be relieved of worry over money matters and his own health. It is only natural that muscles and joints should weaken and stiffen from disuse following injuries, as do an athlete's when he is out of training. Furthermore, the scars from the injuries remain tender for a long time.

An injured man cannot be put together again like a piece of broken machinery, which is greased, oiled and again put in motion. It must be remembered that a person who has been injured, even if it is only a small finger injury, cannot do his work as well the first week or two after he returns as he could the day before he was injured.

Medical examiners, attending physicians, foremen and the patient himself should bear in mind these facts in order to secure the fastest, surest and most permanent recovery.

CANCER AND FEAR

FEAR cannot cause cancer, nor can the absence of fear prevent or cure it, according to the *Campaign Notes* of the American Society for the Prevention of Cancer. A cancer, being a definite, tangible thing, cannot be influenced by the mental state. On the other hand, it is true that the state of mind of a cancer patient may have a definite effect on his general condition. It has happened that an encouraging occurrence, such as the visit of an optimistic physician or a treatment, has greatly increased the patient's weight and mental health. While this is to be desired, it does not in any way affect the cancer.

Fear causes some persons to dread the word cancer, and shun the very thought of it, though they may have good reason to suspect they have it. This sort of unintelligent fear should be fought against, as it may result in harm by delaying treatment. The fear of having cancer which drives the patient to a physician immediately is a fear which will do some good, for it is known that the hope of curing the disease lies in recognizing and treating it in the early stages, or as soon as possible. Since medical science is striving vigorously to advance the cure of cancer, it is necessary to foster in the general public an intelligent attitude toward it.